



# **I** NURSING HOME SAFETY DURING COVID: PPE SHORTAGES

Seven months into pandemic,  
20 percent of facilities lacked enough supplies

FRONTIER GROUP

**TexPIRG** | Education  
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# I CONTENTS

EXECUTIVE SUMMARY.....	1
HEIGHTENED DANGER IN NURSING HOMES.....	3
KEY FINDINGS .....	4
N95 MASKS.....	6
SURGICAL MASKS .....	6
GOWNS.....	10
EYE PROTECTION .....	10
GLOVES.....	10
HAND SANITIZER.....	10
WHAT'S BEHIND THE SHORTAGES?.....	11
WHY IS THE SITUATION SO BAD IN NURSING HOMES? .....	12
HOW CAN THIS PROBLEM BE SOLVED? .....	13
METHODOLOGY.....	15
APPENDIX .....	16
NOTES .....	30

# EXECUTIVE SUMMARY

## THOUSANDS OF NURSING HOMES

nationwide are dealing with horrific shortages of masks, gowns and other items they need to protect residents, workers and the broader community from COVID-19. And seven months into this pandemic, the shortages have actually become much worse.

At any given time, about [1.3 million people](#)<sup>1</sup> with long-term medical issues or short-term rehabilitation needs are residing in the nation's [15,000 nursing homes](#).<sup>2</sup> And too many of them are at risk, according to an analysis of government data by the U.S. PIRG Education Fund and Frontier Group.

As of late August, 226,495 residents in 2,981 nursing homes<sup>3</sup> nationwide were at risk because the homes had dangerously low supplies of one or more types of personal protective equipment (PPE) such as N95 masks or gowns, according to data submitted to the federal government. That means that 20 percent<sup>4</sup> of nursing homes in late August had a less-than-one-week supply of one or more types of PPE, which represents a critical shortage by industry standards.

Of those, 96,132 residents in 1,244 nursing homes<sup>5</sup> nationwide were at severe risk because the homes were completely out of one or more types of critical personal protective equipment (PPE) such as N95 masks or gowns. Our analysis looked at data submitted to the Centers for Medicare & Medicaid Services (CMS)<sup>6</sup> from May 2020

(when the submissions started) through August 2020.

The shortages actually became more grave as the summer went on, with three times<sup>7</sup> as many nursing homes reporting they were completely out of masks, gowns and eye protection in late August, compared with mid-July.

The problem of PPE shortages spanned the entire three-month period we analyzed. Amazingly, 20 percent<sup>8</sup> of nursing homes reported they were completely out of one or more types of PPE at some point from late May through late August. In addition, 46 percent<sup>9</sup> of all nursing homes nationwide reported they didn't have a one-week supply of at least one type of PPE at some point from May through August. A one-week supply is considered the minimum acceptable.

"In the midst of an outbreak, it would be very easy to burn through that remaining supply in less than a week," said [Brian McGarry](#), Ph.D., assistant professor of geriatrics/aging and public health sciences at the University of Rochester Medical Center.<sup>10</sup> In addition, a home may have no idea when its next shipment of PPE may arrive. Homes with less than one week's supply may start rationing, forcing workers to reuse PPE or go without, McGarry said.

One of the many questions this analysis raises: How did the PPE situation not im-

prove and actually get worse throughout this year, as the seriousness of the pandemic became obvious?

In January, the U.S. government declared a [public health emergency](#)<sup>11</sup> in response to the global threat from the coronavirus. The virus was known to be highly contagious and be transmitted through the air. There was widespread fear a pandemic would sweep through

the United States, causing people of all ages to become potentially extremely ill. Sick people often need medical care. Health care workers protect themselves from transmittable diseases, especially severely contagious ones, with masks, gloves and other PPE.

Yet seven months after the public health emergency declaration, this nation was still experiencing dangerous shortages of PPE.

# | Heightened danger in nursing homes

IT'S NOT ENTIRELY SURPRISING THAT while nursing homes contain less than one-half of 1 percent of the U.S. population, they've produced [3 percent of the cases](#) and [27 percent of the deaths nationwide](#).<sup>12</sup>

Experts believe nursing homes have been hit harder in part because the living space is tighter, residents are there round-the-clock and people in nursing homes and rehabilitation facilities are generally older and in poorer health than the overall population.<sup>13</sup> Certainly, the PPE shortages have made difficult situations even worse.

Workers are [generally expected to change their PPE](#)<sup>14</sup> before every new patient to avoid transferring the coronavirus from one patient to another. Many healthcare workers don't have enough PPE to change items every day, much less before every patient, industry officials say.

"The consequences are devastating," said Dr. David Gifford, chief medical officer at the American Health Care Association/ National Center for Assisted Living (AHCA/ NCAL), the nation's largest industry association.<sup>15</sup> "Long-term care is not a profession

where social distancing is possible – caregivers must closely interact with their patients and residents to provide the utmost care."

The impact of PPE shortages? It goes beyond putting individual patients at risk. Experts say:

- Outbreaks can and do occur rapidly in a setting such as a nursing home.
- Workers go home and can spread the virus to family members or to others in the community when they go to the grocery store, church or other public places.
- Workers can get sick and be unable to work, or be exposed and need to quarantine. Either of these can cause staff shortages.
- Even if workers aren't getting sick, they're getting stressed.
- Stressed workers are at more risk of illness. And stressed workers, especially aides and others who may earn barely more than minimum wage, are more likely to quit.



# Key findings

**CMS ASKS NURSING HOMES TO REPORT** their supply of six types of PPE: N95 masks, surgical masks, gowns, eye protection, gloves and hand sanitizer. CMS asks whether the home has any supply of the item and at least a one-week supply of the item. The shortages are profound.

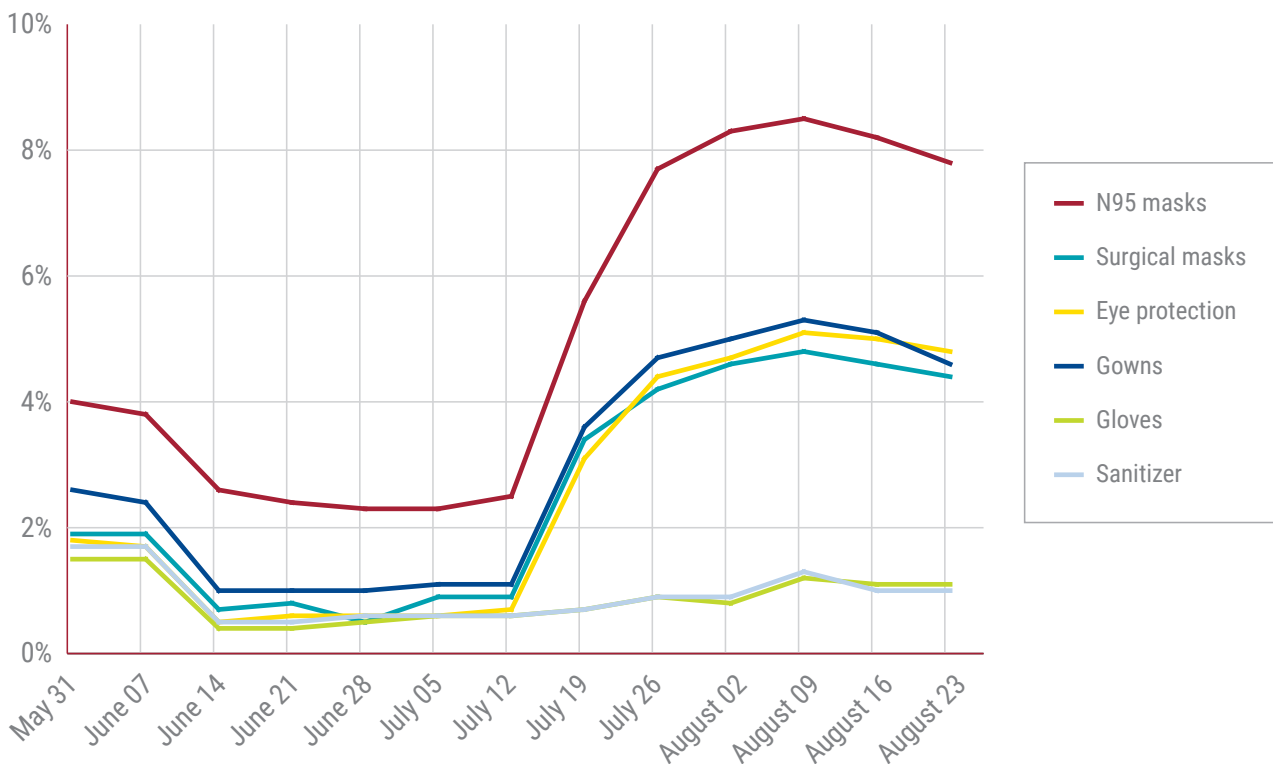
One of the most stunning findings: the escalation of the problem as the summer went on. Homes with no N95 masks, surgical masks, gowns and/or eye protection ranged from 2 to 4 percent at the end of May and improved notably until July 12.<sup>16</sup> But suddenly, the shortages more than tripled between mid-July and late August. With N95 masks, for example, 4 percent of homes had none in May. That dropped

to 2.5 percent in July and then surged to 8 percent in August.<sup>17</sup>

For two other categories of PPE -- gloves and hand sanitizer -- the shortages leveled off from May to June and increased only slightly by August.

The chart on page 5 shows how the lack of one-week supplies fluctuated from May to August. The shortages in May were worst with gowns and N95 masks.<sup>18</sup> The supplies of gowns improved significantly from May to July (those with a less-than-one-week supply dropped from 18 percent of homes to 10 percent). The same was true for hand sanitizer (the shortages dropped from nearly 7 percent to 4 percent).<sup>19</sup>

PERCENTAGE OF NURSING HOMES NATIONWIDE WITH NO SUPPLY OF PPE



Source: U.S. PIRG/ Frontier Group analysis of CMS data.



Then, shortages became a bigger problem, with the number of nursing homes reporting a less-than-one-week supply increasing from July to August for all types of PPE except hand sanitizer. (For example, 17 percent reported a less-than-one-week supply of N95 masks in August, up from 12 percent in July. And 9 percent reported a less-than-one-week supply of surgical masks in August, up from 6 percent in July.)<sup>20</sup>

What does this mean in terms of risk to individuals?

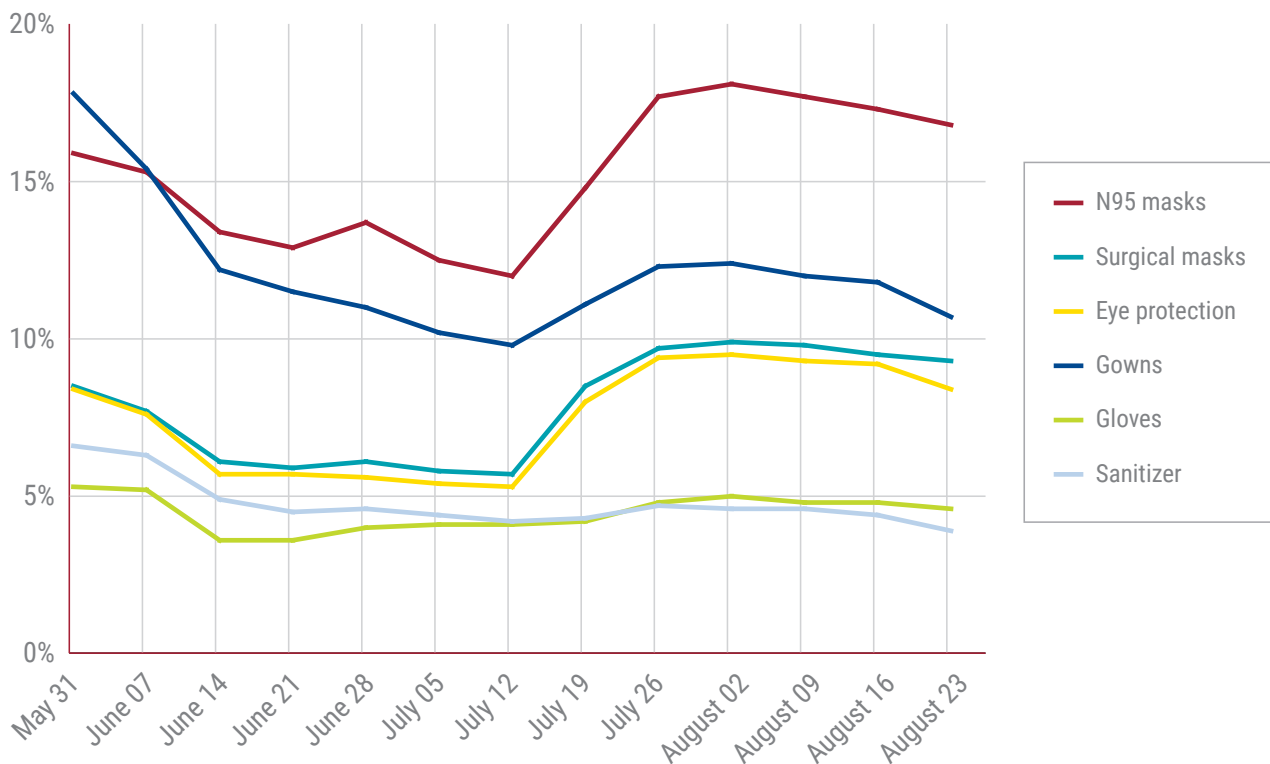
At the end of May, 58,139 residents were at extreme risk because they were in one of 783 nursing homes with no supply of one or more types of PPE. By August, that number had increased to 96,132 residents in 1,244 homes at risk. The number of residents at risk in late August was 65 percent higher than in May.<sup>21</sup>

The number of residents in homes without a one-week supply actually improved a bit: In May, 289,988 residents were at risk in 3,691 homes without a one-week supply of PPE. By late August, those numbers dropped to 226,495 residents in 2,981 homes.<sup>22</sup>

Overall, 5 percent of nursing homes were without one or more types of PPE in May. By August, that increased to 8 percent.<sup>23</sup>

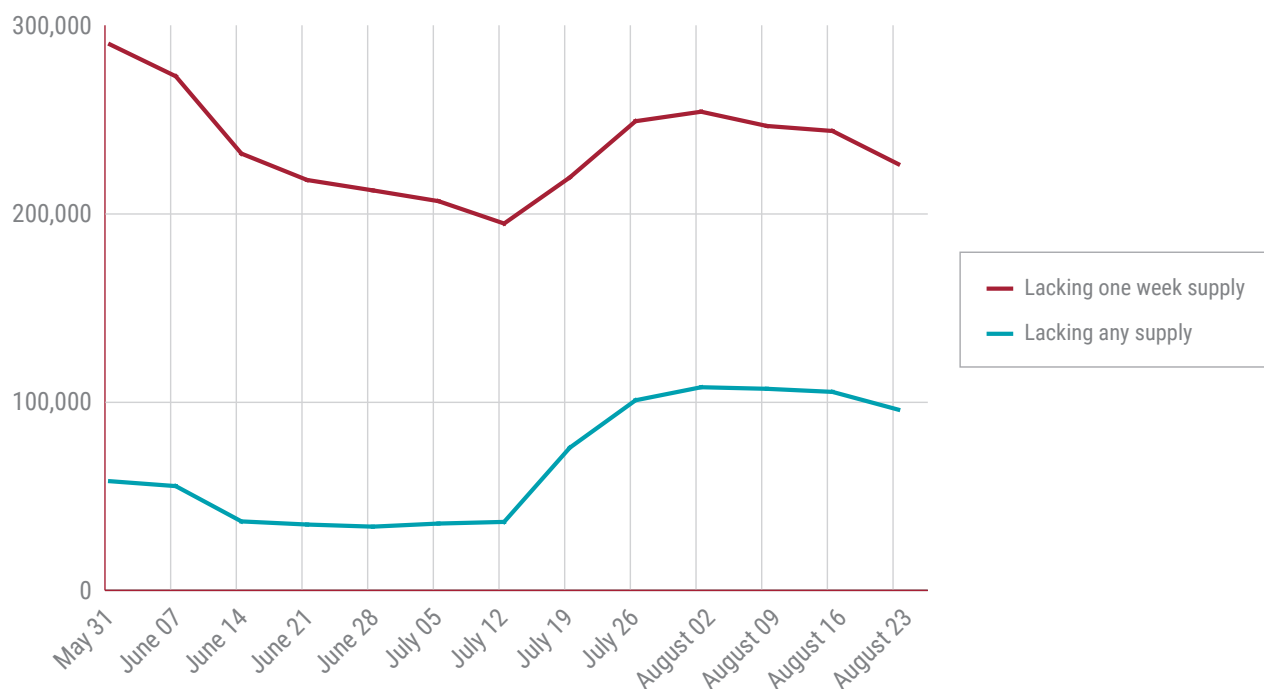
Here's a look at the shortages by type of PPE, for the week ending Aug. 23. CMS asks nursing homes every week to report whether they are completely out of a certain type of PPE or have a less-than-one-week supply, which is regarded as a critical shortage. It's critical because an outbreak could wipe out their supply in a day or two. In addition, it's a huge problem because homes don't necessarily know when they're going to get more of a particular item. It

## PERCENTAGE OF NURSING HOMES NATIONWIDE WITHOUT A ONE-WEEK SUPPLY OF PPE



Source: U.S. PIRG/ Frontier Group analysis of CMS data.

## NUMBER OF RESIDENTS AT NURSING HOMES WITH SHORTAGES OF AT LEAST ONE TYPE OF PPE



Source: U.S. PIRG/ Frontier Group analysis of CMS data.

could be weeks. There are six major types of PPE: N95 masks, surgical masks, gowns, eye protection, gloves and hand sanitizer.

### N95 masks

Nationally, 16.8 percent of homes were out of or critically low on N95 masks.

The five states with the worst shortages were: New Mexico, New Hampshire, Maine, West Virginia and Vermont.

Twenty-four other states / territories were also equal to or worse than the national average: Alabama, Arizona, Colorado, Connecticut, Delaware, Hawaii, Idaho, Iowa, Kansas, Maryland, Michigan, Mississippi, Nebraska, New Jersey, North Carolina, Ohio, Oklahoma, Pennsylvania, Puerto

Rico, South Carolina, Tennessee, Washington, Wisconsin and Wyoming.<sup>24</sup>

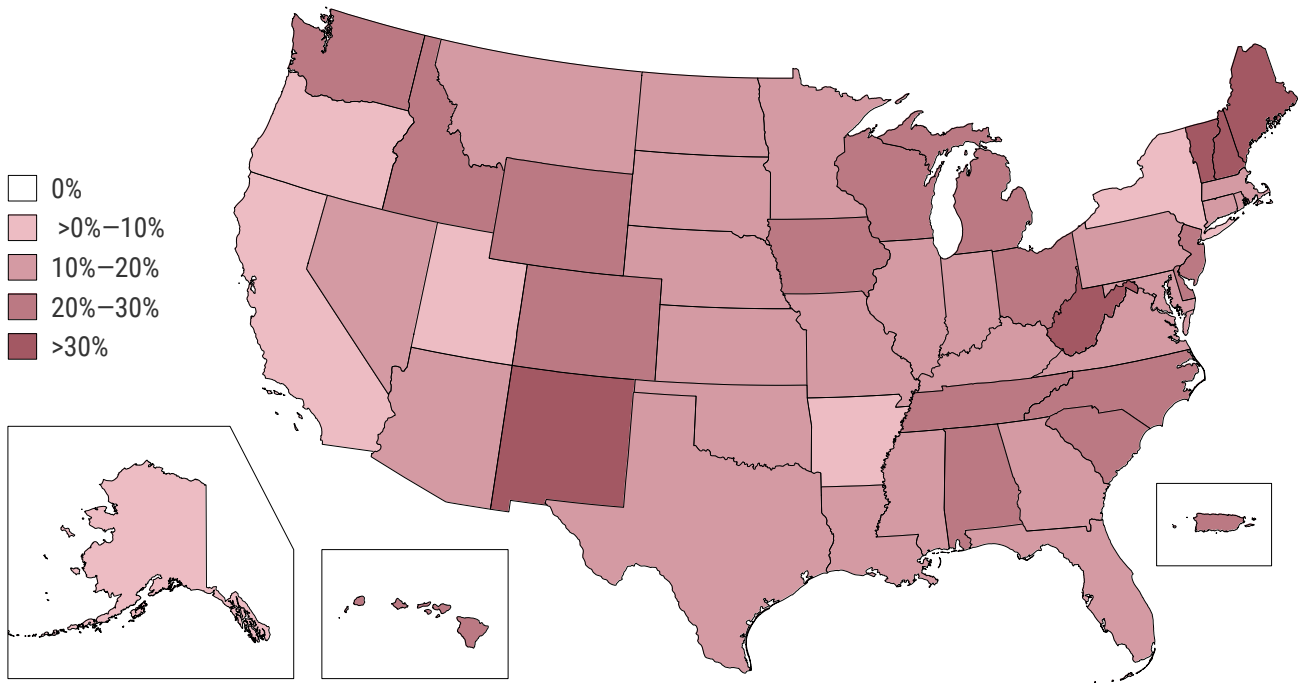
### Surgical masks

Nationally, 9.3 percent of homes were out of or critically low on surgical masks.

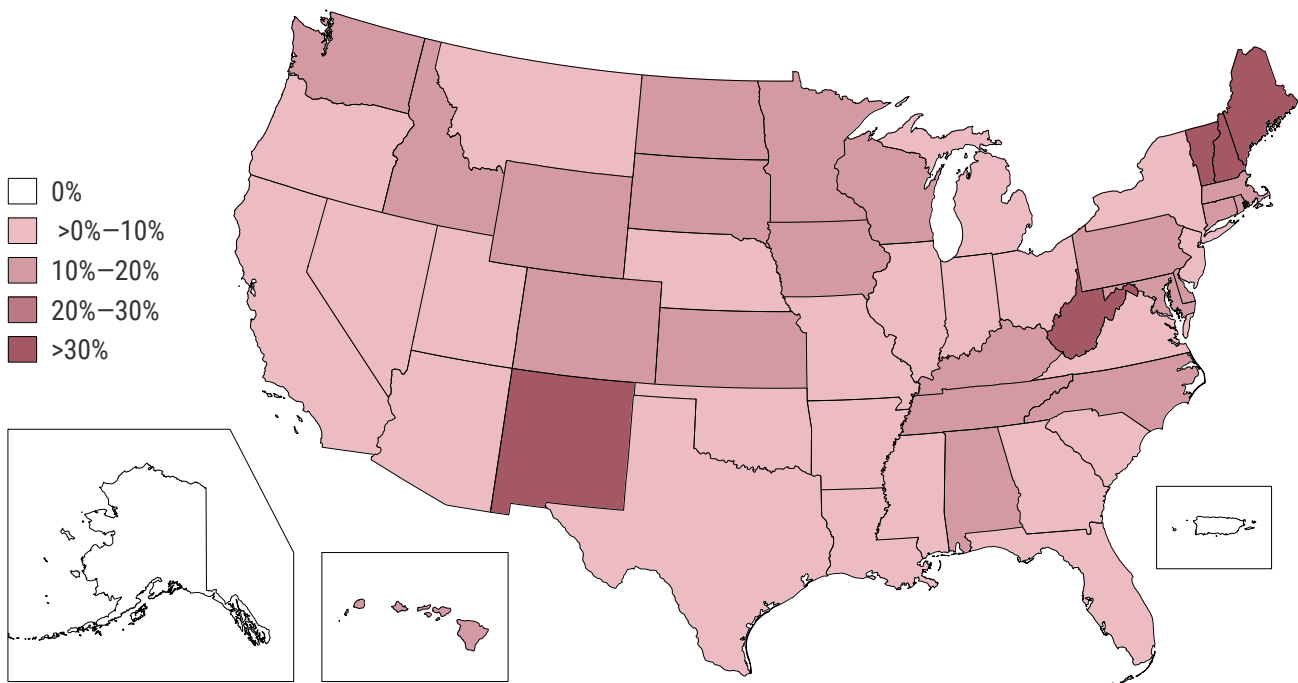
The five states with the worst shortages were: New Mexico, Maine, New Hampshire, West Virginia and Vermont.

Twenty-two other states also were equal to or worse than the national average: Alabama, Arizona, Colorado, Connecticut, Delaware, Hawaii, Idaho, Iowa, Kansas, Kentucky, Maryland, Massachusetts, Minnesota, North Carolina, North Dakota, Pennsylvania, Rhode Island, South Dakota, Tennessee, Washington, Wisconsin and Wyoming.<sup>25</sup>

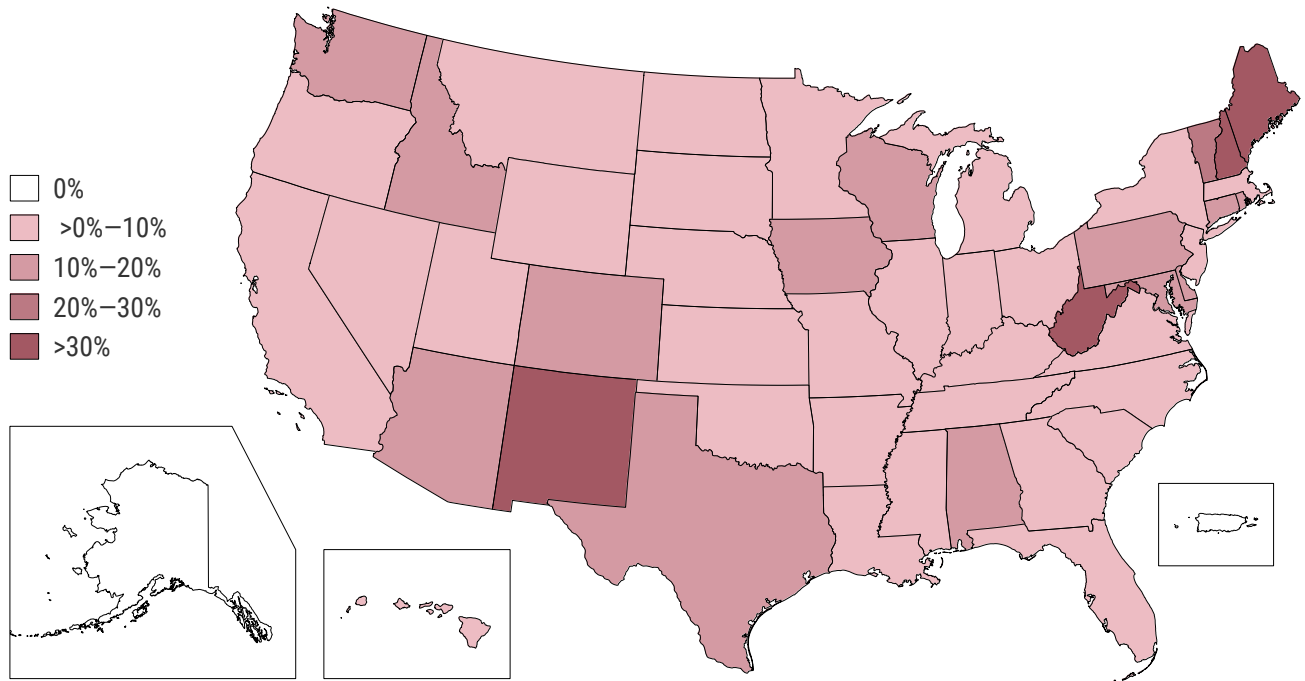
PERCENT OF NURSING HOMES WITH NO SUPPLY OR CRITICAL SHORTAGES OF N95 MASKS AS OF WEEK ENDING 8/23/2020



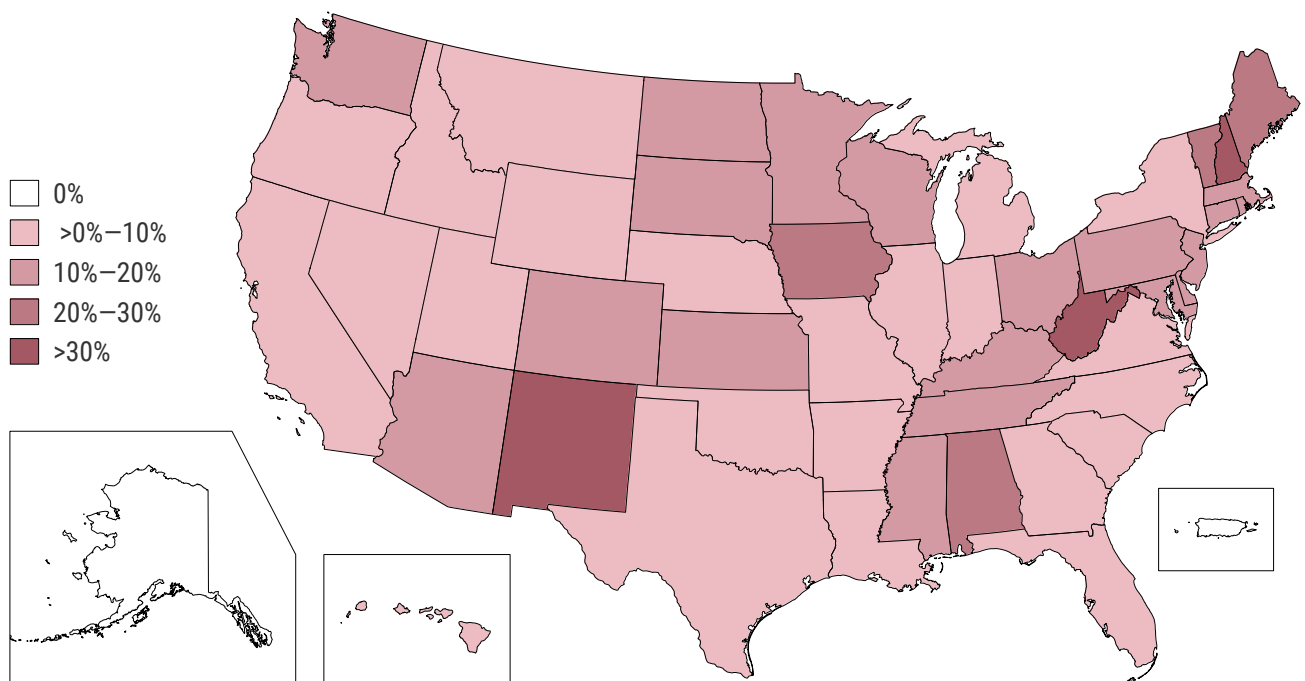
PERCENT OF NURSING HOMES WITH NO SUPPLY OR CRITICAL SHORTAGES OF SURGICAL MASKS AS OF WEEK ENDING 8/23/2020



PERCENT OF NURSING HOMES WITH NO SUPPLY OR CRITICAL SHORTAGES OF EYE PROTECTION AS OF WEEK ENDING 8/23/2020

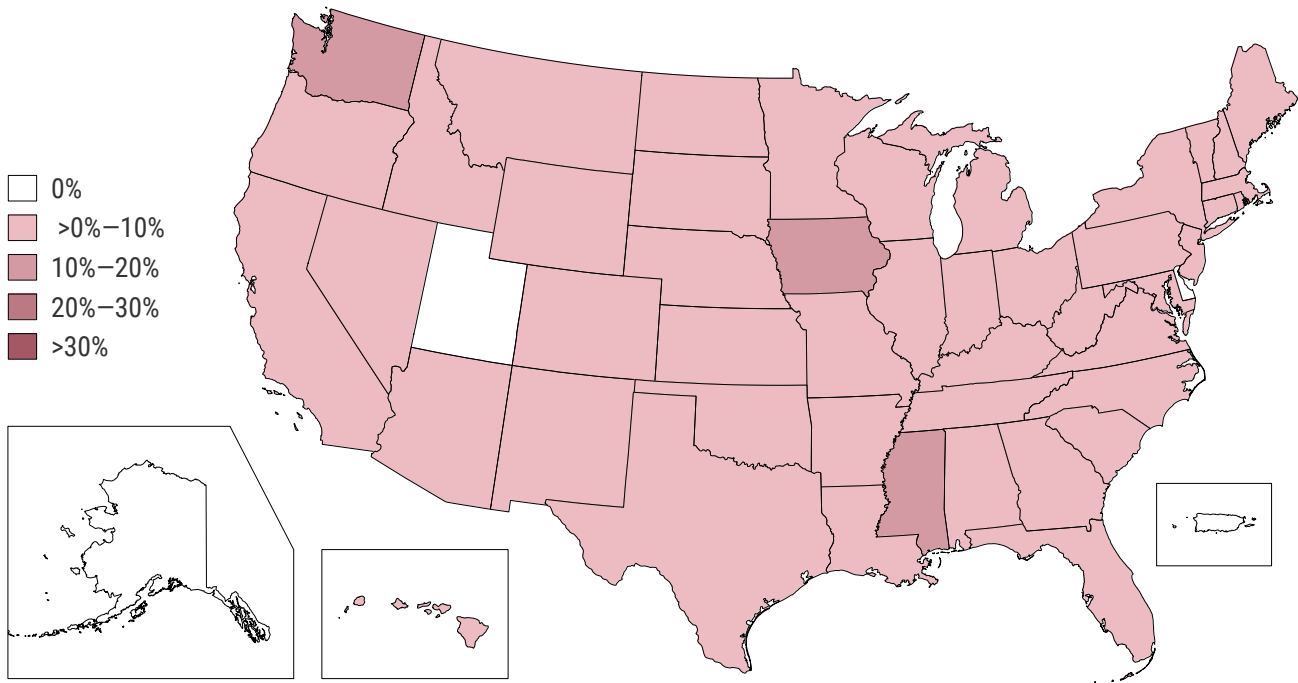


PERCENT OF NURSING HOMES WITH NO SUPPLY OR CRITICAL SHORTAGES OF GOWNS AS OF WEEK ENDING 8/23/2020



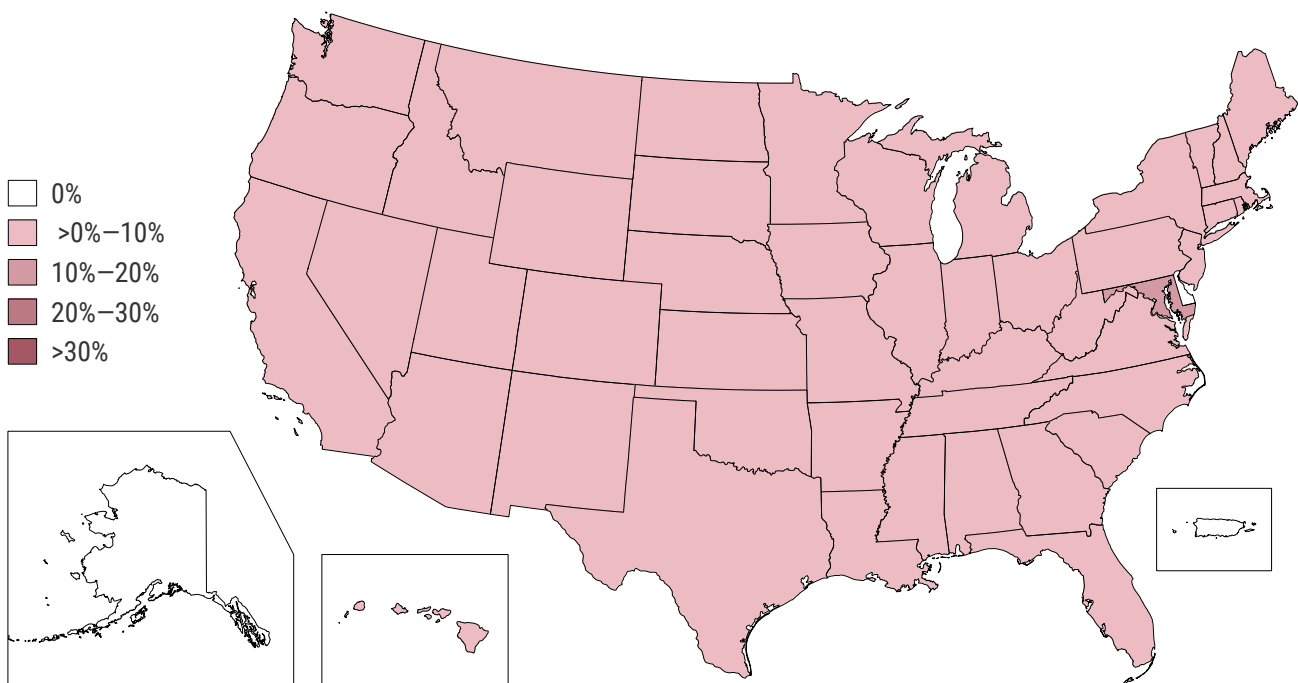
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PERCENT OF NURSING HOMES WITH NO SUPPLY OR CRITICAL SHORTAGES OF GLOVES AS OF WEEK ENDING 8/23/2020



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PERCENT OF NURSING HOMES WITH NO SUPPLY OR CRITICAL SHORTAGES OF HAND SANITIZER AS OF WEEK ENDING 8/23/2020



## **Gowns**

Nationally, 10.7 percent of homes were out of or critically low on gowns.

The five states with the worst shortages were: New Mexico, New Hampshire, West Virginia, Vermont and Alabama.

Nineteen other states were also equal to or worse than the national average: Arizona, Colorado, Connecticut, Delaware, Iowa, Kansas, Kentucky, Maine, Maryland, Minnesota, Mississippi, New Jersey, Ohio, Pennsylvania, Rhode Island, South Dakota, Tennessee, Washington and Wisconsin.<sup>26</sup>

## **Eye protection**

Nationally, 8.4 percent of homes were out of or critically low on eye protection.

The five states with the worst shortages were: New Mexico, New Hampshire, Maine, West Virginia and Vermont.

Nineteen other states also were equal to or worse than the national average: Alabama, Arizona, Colorado, Connecticut, Delaware, Hawaii, Idaho, Iowa, Kentucky, Maryland, Massachusetts, Mississippi, Pennsylvania, Rhode Island, Tennessee, Texas, Washington, Wisconsin and Wyoming.<sup>27</sup>

## **Gloves**

Nationally, 4.6 percent of homes were out of or critically low on gloves.

The five states with the worst shortages were: Iowa, Mississippi, Washington, Tennessee and North Dakota.

Fifteen other states plus DC were also equal to or worse than the national average: Alabama, California, Connecticut, Idaho, Kansas, Maine, Maryland, Minnesota, Montana, Nebraska, New Mexico, Ohio, Oklahoma, Oregon, South Dakota and Washington D.C.<sup>28</sup>

## **Hand sanitizer**

Nationally, 3.9 percent of homes were out of or critically low on hand sanitizer.

The five states with the worst shortages were: Maryland, Oklahoma, Iowa, Washington and Connecticut.

Fifteen other states were also equal to or worse than the national average: Alabama, Arizona, California, Colorado, Hawaii, Kansas, Maine, Michigan, Minnesota, Mississippi, New Hampshire, New Mexico, North Dakota, Tennessee, and Wisconsin.<sup>29</sup>

# | What's behind the shortages?

**IN SOME STATES, THE SUPPLIES COULD** have been drained by outbreaks. For example, South Dakota saw a surge in cases after the Sturgis motorcycle rally in early August.<sup>30</sup> That part of the country has also been hit by outbreaks in meat-packing plants. And in West Virginia, the trajectory of cases increased sharply in mid-July and the state had its worst month for cases and deaths to date in August.<sup>31</sup> But in states like New Hampshire, cases and deaths dropped dramatically in late June and remained relatively low the rest of the summer.<sup>32</sup> There's no immediate indication why PPE was in such short supply.

Overall, the shortages likely were caused by myriad reasons: outbreaks, economics, poor planning or politics or some combination of those.

It's clear the nation as a whole didn't have adequate amounts of PPE to handle a once-in-a-century global pandemic. (No explanations have been provided about why the [Strategic National Stockpile](#)<sup>33</sup> under the U.S. Department of Health and Human Services didn't have more supplies. The federal stockpile, created more than 20 years ago, is a series of warehouses in undisclosed locations nationwide that contain PPE, medication, vaccines and medical equipment in case there's a public health emergency or natural disaster.)

Nursing homes usually buy PPE individually through third-party suppliers, the AHCA said. But the supply chain has been completely disrupted this year. "During this pandemic, providers were desperate for PPE, creating their own or even trying to buy it off Amazon," Gifford said.<sup>34</sup>



# Why is the situation so bad in nursing homes?

DEMAND FOR PPE WAS COMING FROM every sector of the economy, not just health care, the AHCA said. The world supply chain was strained.

“It’s not for a lack of trying to get PPE that long-term care providers were reporting this shortage,” Gifford said. “Nursing homes and assisted living communities desperately searched for legitimate vendors who, due to high demand, often limit the size of their orders and charge exorbitant prices.”<sup>35</sup> The AHCA begged the federal and state governments to help nursing homes and assisted living centers, he said. But long-term care facilities weren’t prioritized to receive PPE, Gifford said.

Robyn Grant, director of public policy and advocacy at the non-profit National Consumer Voice for Quality Long-Term Care of Washington D.C. said the U.S. government didn’t provide much help: two weeks of PPE. In addition, a number of facilities reported that some of the PPE was defective, including gowns with no arm holes and expired N95 masks, she said.

As bad as it was in the spring, it got worse, with PPE shortages skyrocketing in nursing homes in mid-July. Experts blame three phenomena: the reopening of many states in June and July, outbreaks in the South as people flocked to vacation spots and started enjoying summer fun, and the resumption of activities within other medical businesses such as elective surgeries, in-person doctor’s appointments and veterinary procedures.

Reopenings caused “major spikes” in COVID cases in several states, the AHCA said. “The increase in new cases in nursing homes was

being driven by the spike in cases in the surrounding communities and exacerbated by shortages in PPE,” Gifford said.<sup>36</sup>

The PPE shortages exist across various health care settings, according to the American Nurses Association (ANA), which in September released [a survey of 21,000 nurses](#)<sup>37</sup> nationwide. Forty-two percent of them said they continue to cope with “widespread or intermittent” shortages of PPE.

PPE shortages in nursing homes affect both workers and residents, Grant said. Foremost, PPE shortages put residents and staff at greater risk of getting the virus and spreading it.

“We have heard staff say that they have been required to use one mask for days, and that in some cases they have had to use garbage bags because there weren’t enough gowns,” she said. “We’ve also heard staff talk about how worried they are about taking the virus back home to their loved ones.” Reusing a mask [violates health care protocols](#).<sup>38</sup>

“At the same time,” Grant added, “we have heard from some residents that they are terrified when staff don’t have a mask and/or gloves.”<sup>39</sup>

The items in shortest supply -- N95 masks -- are arguably the ones that are most important to protect workers from contracting and spreading the virus. These masks offer better protection from airborne particles. [Surgical masks](#) can protect from large droplets but cannot filter small, airborne particles that could come from someone who coughs or sneezes.<sup>40</sup> In addition, surgical masks don’t fit on a person’s face as well as N95 masks. The N95 masks [used to cost about \\$1 each](#)<sup>41</sup> before the pandemic.

# | How can this problem be solved?

**THIS CRISIS ISN'T GOING AWAY WITHOUT** action. We face the possibility of a brutal fall and winter, if another wave of COVID-19 combined with a normal flu season further strains PPE supplies. Remember that 8 percent of nursing homes didn't have any of one or more critical types of PPE in late August, putting nearly 100,000 residents, plus workers, at risk.

Three months ago, a 25-member commission of non-partisan experts, organized by the Centers for Medicare & Medicaid Services, issued urgent warnings about a problem that will become more dire. [In its updated report in September](#),<sup>42</sup> the Coronavirus Commission on Safety and Quality in Nursing Homes said homes continue to be plagued by shortages in PPE, as well as testing and staffing shortages.

"Additional federal action is necessary to ensure sufficient availability of high-quality testing and PPE," [the commission wrote](#). "Without this, and related training, the virus will continue to spread."

Here's what's needed:

- [Full use of the Defense Production Act](#) to increase U.S. production of PPE, as recommended by the American Nurses Association, the American Medical Association and the American Hospital Association.<sup>43</sup> The Defense Production Act allows the president of the United States to order companies to manufacture certain items and place the federal government first in line to buy them at reasonable prices. The Trump administration used the Defense Production Act to [direct General Motors to make ventilators](#) in the spring.<sup>44</sup> No similar action

was taken to increase production of PPE from providers such as 3M, Honeywell or Kimberly-Clark Corp, although the White House did invoke the law to stop 3M from exporting masks and force it to send masks it made overseas to the United States.

- Passage of the [Medical Supply Transparency and Delivery Act](#),<sup>45</sup> which was introduced in Congress this spring. This legislation would require the National Response Coordination Center (NRCC) under the Federal Emergency Management Agency (FEMA) to direct national production and distribution of critical supplies to fight COVID-19. It would also require an inspector general to be appointed to oversee this effort and require the Government Accountability Office to submit a report to Congress on the Strategic National Stockpile. No action has been taken on the bill since May. The [ANA supports congressional action on this](#).<sup>46</sup>

These steps would improve the supply chain so it's centralized and transparent, with a publicly available website displaying quantities of supplies. This would keep prices stable because states, individual health care facilities, school systems and businesses wouldn't be competing against each other.

Several states over the months have reported they placed bids for various PPE or equipment, only to be outbid by FEMA. [In a statement](#) that could have been echoed by many states, Kentucky Gov. Andy Beshear, a Democrat, said at a [news conference in early April](#): "Our biggest problem is that just about every

single order that we have out there for PPE, we get a call right when it's supposed to be shipped and it's typically, "The federal government has bought it."

Other states said their supplies were confiscated by federal authorities. In Massachusetts, [the state relied on New England Patriots' owner Robert Kraft](#) to use the pro football team's private plane to transport 1 million medical masks for health-care workers from China to Boston.<sup>47</sup> The state said a [previous shipment of 3 million masks was confiscated](#) at the Port of New York. State officials said they believe the federal government confiscated the masks and put them in the national stockpile.<sup>48</sup>

We've seen a pattern of the federal government operating in the dark and causing even more chaos in the supply chain by seizing orders from states without notice or explanation. This is the reason transparency is needed as desperately as more production.

- In the absence of federal coordination, states need to find their own solutions. All year, various states and businesses within them have been bidding against each other and even against the federal government to buy PPE, which of course drives prices up.

For example, when caseloads soared in New York, the early COVID-19 epicenter, the state paid quadruple the normal price for medical gloves and 15 times the normal price for masks, according to a [ProPublica analysis](#).<sup>49</sup>

To stop that, various groups of states have formed consortiums for regional supply chains, so they're not competing against each other for the same PPE, tests and equipment. Success has been mixed, in part because the consortiums sometimes have been trying to buy multiple items.

Forming consortiums around a single product, such as masks, will make them more effective.

- Money in a new COVID relief bill to help nursing homes. PPE supplies are key to fighting COVID, the AHCA said. It [asked Congress](#) to provide \$100 billion to help health-care providers, with a large chunk dedicated to helping nursing homes and assisted living facilities with PPE, as well as increased testing and staff support.<sup>50</sup> "For months, we were fighting an invisible virus with our hands behind our backs," Gifford said. "With the proper resources, long-term care facilities can better identify who has the virus, make tactical decisions to protect residents and staff, and make more efficient use of hard-to-come-by supplies."<sup>51</sup>
- The federal and state governments to prioritize PPE to providers coping with severe shortages. Money doesn't solve the problem if there are no supplies to purchase.

Something must change soon. "Our health care heroes are risking their own safety and security to continue their valiant work of caring for our nation's most vulnerable," Gifford said. "And we must rally around them and our vulnerable residents."

# | Methodology

**THIS REPORT USES DATA FROM THE** Center for Medicare and Medicaid Services, *COVID-19 Nursing Home Dataset*, downloaded from <https://data.cms.gov/Special-Programs-Initiatives-COVID-19-Nursing-Home/COVID-19-Nursing-Home-Dataset/s2uc-8wxp> on 9 September 2020.

Data were filtered to exclude any entries marked “N” for the column “Submitted Data” as well as any entries marked “N” for “Passed Quality Assurance Check.” A detailed explanation on CMS’s quality assurance check process can be found on the CMS website.<sup>52</sup> This analysis does not include data for the week ending 5/24/2020, as the CMS website reports that data reported for that week may actually include reporting from multiple weeks.<sup>53</sup> The analysis includes data labeled 5/31/2020 to 8/23/2020 for the “Week Ending” date.

In the original CMS dataset, the column “Federal Provider Number” identifies each unique nursing home, and the column “Total Number of Occupied Beds” was used to determine the number of residents in each nursing home. Each nursing home can only submit one entry per week, however not

every home submitted an entry every week from 5/31/2020 to 8/23/2020.

Six types of PPE were considered for this report: N95 masks, surgical masks, eye protection, gowns, gloves, and hand sanitizer. For each type of PPE, there were two recorded categories of shortages, “Any Current Supply” and “One-Week Supply.” For both of these categories, the percentage of homes that reported a shortage each week nationwide was calculated, as well as by state. To calculate these percentages, the number of homes that reported “N” was divided by the total number of homes that reported “N” or “Y” for the week in question, and any homes that left this category blank were not included. Similarly, if a home marked “N” for any type of PPE, it was included in the calculation of number and percentage of nursing homes that reported not having any of at least one type of PPE.

To determine the number of residents “at risk,” meaning that they were in a home without any of at least one type of PPE, the “Total Number of Occupied Beds” was summed by week for homes that reported a shortage of at least one type of PPE. The same process was repeated for “One-Week Supply” shortages.

# Appendix

## PERCENTAGE OF NURSING HOMES NATIONWIDE WITH NO SUPPLY OF PPE

Week Ending	N95 masks	Surgical masks	Eye protection	Gowns	Gloves	Sanitizer
2020-05-31	4.0%	1.9%	1.8%	2.6%	1.5%	1.7%
2020-06-07	3.8%	1.9%	1.7%	2.4%	1.5%	1.7%
2020-06-14	2.6%	0.7%	0.5%	1.0%	0.4%	0.5%
2020-06-21	2.4%	0.8%	0.6%	1.0%	0.4%	0.5%
2020-06-28	2.3%	0.5%	0.6%	1.0%	0.5%	0.6%
2020-07-05	2.3%	0.9%	0.6%	1.1%	0.6%	0.6%
2020-07-12	2.5%	0.9%	0.7%	1.1%	0.6%	0.6%
2020-07-19	5.6%	3.4%	3.1%	3.6%	0.7%	0.7%
2020-07-26	7.7%	4.2%	4.4%	4.7%	0.9%	0.9%
2020-08-02	8.3%	4.6%	4.7%	5.0%	0.8%	0.9%
2020-08-09	8.5%	4.8%	5.1%	5.3%	1.2%	1.3%
2020-08-16	8.2%	4.6%	5.0%	5.1%	1.1%	1.0%
2020-08-23	7.8%	4.4%	4.8%	4.6%	1.1%	1.0%

## PERCENTAGE OF NURSING HOMES NATIONWIDE WITHOUT A ONE-WEEK SUPPLY OF PPE

Week Ending	N95 masks	Surgical masks	Eye protection	Gowns	Gloves	Sanitizer
2020-05-31	15.9%	8.5%	8.4%	17.8%	5.3%	6.6%
2020-06-07	15.3%	7.7%	7.6%	15.4%	5.2%	6.3%
2020-06-14	13.4%	6.1%	5.7%	12.2%	3.6%	4.9%
2020-06-21	12.9%	5.9%	5.7%	11.5%	3.6%	4.5%
2020-06-28	13.7%	6.1%	5.6%	11.0%	4.0%	4.6%
2020-07-05	12.5%	5.8%	5.4%	10.2%	4.1%	4.4%
2020-07-12	12.0%	5.7%	5.3%	9.8%	4.1%	4.2%
2020-07-19	14.8%	8.5%	8.0%	11.1%	4.2%	4.3%
2020-07-26	17.7%	9.7%	9.4%	12.3%	4.8%	4.7%
2020-08-02	18.1%	9.9%	9.5%	12.4%	5.0%	4.6%
2020-08-09	17.7%	9.8%	9.3%	12.0%	4.8%	4.6%
2020-08-16	17.3%	9.5%	9.2%	11.8%	4.8%	4.4%
2020-08-23	16.8%	9.3%	8.4%	10.7%	4.6%	3.9%

## NUMBER OF RESIDENTS AT NURSING HOMES WITH SHORTAGES OF AT LEAST ONE TYPE OF PPE

Week Ending	Number of residents at homes w/o any supply	Number of residents at homes w/o 1 week supply
2020-05-31	58,139	289,988
2020-06-07	55,534	273,096
2020-06-14	36,795	232,049
2020-06-21	35,133	218,044
2020-06-28	34,012	212,534
2020-07-05	35,655	206,816
2020-07-12	36,535	194,926
2020-07-19	75,934	219,404
2020-07-26	101,092	249,248
2020-08-02	108,029	254,288
2020-08-09	107,188	246,725
2020-08-16	105,550	244,056
2020-08-23	96,132	226,495

## NUMBER OF NURSING HOMES WITH SHORTAGES OF AT LEAST ONE TYPE OF PPE

Week Ending	Homes w/o any supply	Homes w/o 1 week supply
2020-05-31	783	3,691
2020-06-07	742	3,480
2020-06-14	514	3,019
2020-06-21	483	2,856
2020-06-28	469	2,772
2020-07-05	489	2,686
2020-07-12	491	2,576
2020-07-19	973	2,866
2020-07-26	1,297	3,292
2020-08-02	1,383	3,350
2020-08-09	1,390	3,255
2020-08-16	1,357	3,196
2020-08-23	1,244	2,981



## CRITICAL SHORTAGE OF N95 MASKS, LESS THAN ONE-WEEK SUPPLY BY STATE

Provider State	May 31, 2020	June 7, 2020	June 14, 2020	June 21, 2020	June 28, 2020	July 5, 2020	July 12, 2020	July 19, 2020	July 26, 2020	August 2, 2020	August 9, 2020	August 16, 2020	August 23, 2020
AK	5.6%	5.9%	5.9%	10.0%	15.0%	10.0%	10.0%	10.5%	10.0%	10.0%	10.0%	15.8%	5.9%
AL	35.9%	34.4%	33.2%	29.2%	26.7%	27.4%	22.8%	29.6%	31.7%	29.1%	28.0%	27.3%	27.9%
AR	20.9%	19.3%	17.8%	16.4%	14.9%	12.4%	8.1%	11.0%	10.0%	9.7%	9.6%	9.6%	7.8%
AZ	14.1%	15.7%	13.3%	13.4%	15.8%	15.1%	12.1%	15.0%	18.6%	16.9%	18.2%	16.9%	17.5%
CA	13.9%	14.7%	12.7%	11.2%	11.4%	10.3%	10.8%	10.3%	9.0%	8.7%	7.3%	7.2%	7.3%
CO	27.2%	26.0%	17.2%	15.0%	16.4%	15.8%	17.1%	19.8%	23.0%	23.7%	22.1%	23.9%	20.8%
CT	20.8%	20.7%	19.3%	19.1%	18.3%	16.7%	18.2%	20.0%	21.5%	21.1%	20.0%	18.7%	19.1%
DC	0.0%	5.6%	0.0%	0.0%	0.0%	5.9%	0.0%	10.5%	5.3%	5.3%	10.5%	10.5%	5.9%
DE	17.4%	10.9%	8.7%	8.7%	17.4%	8.7%	8.9%	23.9%	26.7%	30.4%	28.3%	23.9%	22.7%
FL	19.8%	17.0%	13.6%	12.4%	13.8%	12.2%	13.1%	14.6%	16.4%	15.1%	15.5%	14.1%	13.0%
GA	14.6%	14.6%	9.2%	7.6%	7.7%	8.8%	9.0%	11.2%	14.1%	12.8%	11.2%	11.2%	10.5%
GU	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
HI	11.6%	14.0%	14.0%	11.4%	13.6%	9.3%	16.3%	16.3%	18.6%	16.3%	16.3%	19.5%	21.4%
IA	20.5%	21.6%	22.3%	26.1%	28.8%	29.1%	27.4%	34.2%	35.8%	34.6%	34.6%	34.2%	29.3%
ID	15.6%	20.7%	17.5%	19.8%	14.6%	17.1%	18.3%	22.0%	19.5%	14.8%	14.8%	13.6%	22.8%
IL	10.2%	9.6%	8.1%	7.5%	7.5%	6.8%	7.3%	9.4%	10.7%	12.3%	12.4%	12.1%	12.8%
IN	12.9%	12.5%	11.9%	10.7%	10.3%	10.9%	9.3%	10.2%	12.9%	11.5%	12.1%	14.8%	15.1%
KS	23.5%	22.3%	22.0%	23.2%	22.5%	18.9%	18.9%	22.4%	23.9%	23.9%	24.4%	22.3%	18.9%
KY	8.2%	8.7%	9.4%	8.2%	10.4%	8.3%	7.8%	11.8%	16.1%	16.6%	14.7%	16.1%	15.8%
LA	7.9%	8.1%	8.0%	8.0%	7.8%	7.8%	8.6%	12.5%	14.2%	15.7%	16.7%	16.7%	14.2%
MA	14.1%	13.0%	11.6%	12.2%	13.7%	12.2%	7.9%	14.6%	19.7%	20.7%	20.3%	17.8%	13.1%
MD	15.1%	14.9%	6.0%	6.5%	12.0%	6.8%	6.8%	13.2%	14.5%	14.2%	14.2%	17.6%	17.9%
ME	39.1%	39.1%	33.7%	33.7%	42.4%	31.5%	30.4%	34.8%	41.8%	39.1%	43.5%	42.4%	42.9%
MI	17.9%	17.2%	14.7%	13.5%	13.8%	13.2%	12.3%	12.9%	16.3%	20.7%	21.6%	22.2%	20.4%
MN	19.9%	19.8%	15.4%	13.2%	13.3%	14.7%	13.1%	13.0%	12.8%	13.8%	13.6%	13.9%	14.8%
MO	13.2%	13.7%	12.2%	11.3%	10.5%	11.0%	7.7%	8.8%	10.7%	10.5%	11.6%	12.0%	12.3%
MS	13.7%	13.9%	12.0%	11.8%	11.9%	12.0%	13.8%	16.0%	18.9%	19.7%	20.5%	18.5%	16.8%
MT	10.4%	13.2%	14.5%	23.2%	26.5%	24.6%	21.7%	30.0%	25.7%	20.3%	18.8%	18.8%	13.8%
NC	29.9%	28.5%	22.7%	21.7%	22.4%	23.4%	22.1%	24.0%	34.1%	36.9%	35.5%	32.0%	28.4%
ND	12.5%	8.8%	8.8%	7.5%	7.5%	7.5%	6.3%	7.5%	8.8%	10.0%	13.8%	12.7%	10.5%
NE	11.7%	12.6%	13.0%	19.2%	19.3%	17.5%	15.5%	16.9%	20.7%	21.5%	19.8%	17.8%	17.9%
NH	36.5%	36.5%	36.5%	31.5%	39.7%	31.5%	23.3%	50.0%	48.6%	48.6%	47.3%	50.0%	44.6%
NJ	13.8%	12.6%	9.3%	7.9%	12.9%	8.2%	9.0%	16.6%	23.0%	21.7%	20.9%	21.5%	20.2%
NM	39.7%	34.8%	29.9%	34.3%	36.8%	23.5%	26.5%	39.7%	45.6%	44.8%	42.6%	44.1%	45.3%
NV	13.3%	15.6%	10.9%	12.7%	11.9%	10.9%	10.8%	10.9%	12.7%	12.9%	12.5%	12.7%	14.1%
NY	11.0%	11.3%	10.5%	8.3%	8.0%	7.3%	7.1%	8.1%	8.8%	6.4%	5.1%	3.3%	4.0%
OH	17.5%	15.6%	16.8%	16.1%	15.0%	14.6%	15.2%	16.8%	22.0%	26.0%	25.6%	24.7%	25.2%
OK	14.2%	15.7%	16.0%	15.8%	14.1%	15.3%	16.3%	17.3%	16.1%	18.3%	19.9%	18.2%	18.6%
OR	6.5%	7.3%	7.3%	7.2%	5.6%	7.3%	4.8%	8.9%	8.8%	5.8%	8.1%	8.2%	8.7%
PA	6.8%	6.9%	7.1%	6.7%	10.3%	5.4%	5.8%	12.0%	17.2%	18.6%	18.2%	17.0%	17.2%
PR	20.0%	20.0%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	20.0%
RI	13.2%	11.5%	12.7%	11.5%	11.5%	9.0%	8.9%	14.1%	13.9%	16.7%	17.7%	17.7%	16.7%
SC	20.6%	18.7%	16.7%	17.8%	17.8%	16.3%	18.8%	20.3%	21.0%	20.3%	20.6%	20.9%	20.0%
SD	11.8%	9.7%	10.6%	8.7%	11.7%	10.6%	8.7%	11.7%	10.6%	11.5%	11.5%	10.7%	12.2%
TN	24.4%	22.5%	21.3%	20.8%	20.3%	19.2%	20.5%	20.2%	24.8%	25.7%	25.2%	25.0%	25.2%
TX	10.5%	9.4%	4.2%	4.0%	4.8%	4.2%	4.2%	4.1%	13.5%	13.7%	13.2%	13.3%	12.7%
UT	6.6%	7.4%	5.2%	3.2%	3.2%	6.3%	5.4%	4.3%	6.5%	5.3%	5.2%	4.3%	3.3%
VA	17.8%	15.6%	14.9%	14.2%	18.7%	12.1%	10.3%	22.8%	20.1%	19.5%	17.4%	16.2%	16.7%
VT	11.4%	8.6%	8.8%	8.8%	14.3%	5.7%	5.7%	28.6%	28.6%	28.6%	25.7%	25.7%	30.3%
WA	18.6%	18.4%	19.3%	16.8%	17.9%	17.4%	17.9%	20.4%	20.4%	23.5%	22.5%	19.8%	20.1%
WI	14.8%	13.6%	13.2%	14.3%	13.8%	15.5%	14.6%	15.8%	20.1%	22.3%	21.4%	20.1%	22.0%
WV	23.8%	20.5%	22.1%	20.5%	33.6%	19.7%	18.9%	34.4%	36.9%	36.1%	37.2%	35.0%	36.4%
WY	23.5%	25.7%	17.1%	17.6%	18.2%	15.2%	14.3%	23.5%	15.2%	17.6%	15.2%	21.2%	22.9%
<b>National</b>	<b>15.90%</b>	<b>15.30%</b>	<b>13.40%</b>	<b>12.90%</b>	<b>13.70%</b>	<b>12.50%</b>	<b>12.00%</b>	<b>14.80%</b>	<b>17.70%</b>	<b>18.10%</b>	<b>17.70%</b>	<b>17.30%</b>	<b>16.80%</b>



## CRITICAL SHORTAGE OF SURGICAL MASKS, LESS THAN ONE-WEEK SUPPLY BY STATE

Provider State	May 31, 2020	June 7, 2020	June 14, 2020	June 21, 2020	June 28, 2020	July 5, 2020	July 12, 2020	July 19, 2020	July 26, 2020	August 2, 2020	August 9, 2020	August 16, 2020	August 23, 2020
AK	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%
AL	13.0%	12.4%	11.2%	10.6%	9.0%	10.3%	13.0%	16.2%	18.3%	19.7%	18.3%	18.6%	19.5%
AR	8.5%	7.8%	5.9%	6.4%	5.0%	4.6%	4.7%	3.7%	3.7%	4.6%	3.2%	4.1%	3.4%
AZ	8.1%	5.7%	5.6%	5.6%	6.5%	7.2%	6.4%	7.9%	10.0%	8.8%	9.5%	8.5%	9.5%
CA	9.3%	9.9%	8.0%	7.5%	7.4%	6.2%	6.0%	6.1%	5.9%	5.7%	5.1%	4.9%	4.9%
CO	20.7%	18.7%	8.6%	8.6%	9.1%	7.7%	9.0%	13.1%	16.2%	16.0%	17.1%	14.9%	13.7%
CT	2.5%	3.0%	1.9%	1.0%	1.9%	1.4%	1.9%	9.5%	11.5%	15.3%	15.2%	9.6%	10.5%
DC	5.9%	0.0%	0.0%	5.3%	0.0%	11.8%	0.0%	5.3%	5.3%	5.3%	10.5%	5.3%	5.9%
DE	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	19.6%	20.0%	21.7%	19.6%	17.4%	15.9%
FL	7.3%	5.7%	3.9%	4.0%	5.2%	5.2%	4.7%	7.1%	7.6%	7.8%	8.4%	7.5%	6.7%
GA	9.7%	9.9%	5.3%	5.6%	6.2%	6.5%	6.0%	6.2%	8.4%	5.6%	5.0%	4.7%	4.8%
GU	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
HI	7.0%	4.7%	4.7%	2.3%	2.3%	4.7%	7.0%	7.0%	11.6%	11.6%	11.6%	12.2%	11.9%
IA	16.2%	15.3%	15.0%	20.9%	23.4%	21.6%	19.9%	21.2%	24.4%	26.6%	25.9%	24.2%	18.6%
ID	5.2%	1.2%	2.5%	3.7%	3.7%	6.1%	3.7%	7.3%	6.1%	3.7%	4.9%	6.2%	10.1%
IL	6.2%	6.4%	4.2%	3.6%	4.0%	4.3%	3.9%	4.5%	6.2%	7.0%	6.4%	5.8%	6.7%
IN	10.2%	9.1%	8.2%	7.8%	6.8%	5.8%	4.1%	6.9%	8.1%	9.4%	9.6%	8.3%	7.9%
KS	15.5%	14.2%	13.6%	14.6%	13.9%	12.1%	13.4%	12.8%	16.8%	15.5%	17.2%	14.7%	13.6%
KY	4.1%	3.3%	2.5%	2.2%	1.4%	2.5%	3.2%	8.6%	9.3%	8.7%	9.0%	10.7%	10.3%
LA	4.0%	1.9%	1.5%	1.1%	1.2%	2.0%	3.9%	2.7%	2.0%	3.5%	3.2%	4.4%	3.6%
MA	6.6%	6.8%	6.8%	6.3%	6.5%	7.6%	4.6%	11.9%	14.3%	14.1%	14.5%	13.7%	10.1%
MD	14.6%	14.4%	6.9%	6.9%	9.2%	8.2%	7.3%	16.4%	17.2%	16.9%	17.0%	19.4%	19.3%
ME	27.2%	31.5%	30.4%	26.1%	25.0%	23.9%	21.7%	31.5%	38.5%	39.1%	41.3%	37.0%	38.5%
MI	8.1%	7.5%	4.2%	3.4%	5.2%	4.4%	4.1%	3.9%	5.4%	8.0%	8.5%	8.8%	8.0%
MN	7.6%	6.8%	5.3%	6.2%	5.4%	7.5%	7.8%	8.6%	8.9%	10.5%	11.1%	9.5%	15.4%
MO	8.5%	6.7%	5.7%	5.9%	5.1%	5.3%	4.0%	5.3%	4.8%	5.5%	5.8%	6.4%	6.2%
MS	8.2%	8.6%	7.3%	6.2%	6.7%	7.8%	8.7%	8.8%	8.4%	10.4%	9.5%	5.8%	8.7%
MT	11.9%	14.7%	13.0%	21.7%	19.1%	21.7%	21.7%	22.9%	24.3%	15.9%	10.1%	8.7%	4.6%
NC	19.8%	19.5%	12.3%	11.6%	11.1%	11.6%	12.7%	14.8%	15.3%	16.4%	15.5%	17.6%	15.3%
ND	13.8%	10.0%	8.8%	6.3%	8.8%	6.3%	7.5%	6.3%	8.8%	8.8%	15.0%	12.7%	11.8%
NE	4.8%	3.1%	2.6%	3.1%	4.7%	4.1%	4.1%	3.6%	5.2%	5.2%	6.3%	5.8%	5.4%
NH	6.8%	9.5%	6.8%	6.8%	6.8%	9.6%	4.1%	44.6%	41.9%	41.9%	41.9%	41.9%	36.5%
NJ	2.8%	2.1%	2.4%	1.2%	1.5%	0.9%	1.2%	9.3%	9.6%	9.2%	9.9%	9.6%	8.9%
NM	4.8%	4.5%	0.0%	1.5%	0.0%	0.0%	0.0%	35.3%	36.8%	37.3%	39.7%	36.8%	40.6%
NV	5.0%	4.7%	1.6%	3.2%	3.4%	3.1%	3.1%	4.7%	6.3%	4.8%	4.7%	4.8%	4.7%
NY	3.7%	2.1%	2.5%	1.7%	2.0%	2.0%	1.7%	2.8%	2.7%	2.8%	3.6%	2.0%	2.0%
OH	5.8%	4.9%	5.8%	5.1%	4.5%	5.2%	5.2%	6.0%	7.6%	8.7%	8.5%	8.6%	8.0%
OK	1.1%	1.4%	1.4%	1.7%	2.4%	1.4%	2.4%	1.4%	2.4%	3.8%	2.1%	7.9%	7.3%
OR	2.4%	3.2%	4.0%	5.6%	4.0%	6.5%	3.2%	7.3%	8.0%	6.6%	6.5%	4.9%	7.8%
PA	5.3%	3.9%	5.0%	3.5%	3.2%	2.9%	3.8%	8.9%	14.0%	13.4%	13.0%	13.2%	13.0%
PR	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
RI	1.3%	2.6%	2.5%	2.6%	0.0%	0.0%	1.3%	10.3%	10.1%	11.5%	15.2%	12.7%	11.5%
SC	8.9%	8.0%	4.8%	5.9%	6.5%	3.8%	5.5%	6.6%	6.1%	4.9%	6.1%	4.9%	5.7%
SD	10.8%	6.8%	6.7%	6.8%	7.8%	5.8%	6.7%	7.8%	10.6%	8.7%	7.7%	7.8%	11.2%
TN	15.9%	13.2%	11.6%	10.9%	11.0%	10.6%	11.2%	10.6%	16.5%	14.3%	12.9%	11.7%	14.3%
TX	6.5%	6.1%	1.4%	1.0%	1.6%	0.7%	1.1%	1.5%	1.8%	1.0%	1.2%	1.5%	1.0%
UT	2.2%	4.2%	5.2%	3.2%	3.2%	6.3%	2.2%	2.2%	3.3%	3.2%	4.2%	2.1%	2.2%
VA	10.4%	6.9%	7.1%	5.7%	6.7%	3.5%	4.6%	17.1%	12.4%	10.6%	8.9%	9.0%	9.1%
VT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.6%	28.6%	25.7%	25.7%	25.7%	30.3%
WA	13.4%	13.4%	13.9%	12.4%	13.4%	13.4%	13.4%	15.4%	15.9%	16.8%	17.0%	13.4%	14.8%
WI	9.9%	9.0%	8.0%	6.9%	7.8%	6.9%	7.7%	9.2%	13.2%	13.7%	13.1%	14.0%	13.7%
WV	8.2%	5.7%	3.3%	4.9%	4.9%	4.1%	4.1%	32.0%	36.1%	34.4%	33.9%	33.3%	34.7%
WY	14.7%	20.0%	11.4%	14.7%	12.1%	12.1%	11.4%	17.6%	15.2%	14.7%	12.1%	12.1%	11.4%
<b>National</b>	<b>8.50%</b>	<b>7.70%</b>	<b>6.10%</b>	<b>5.90%</b>	<b>6.10%</b>	<b>5.80%</b>	<b>5.70%</b>	<b>8.50%</b>	<b>9.70%</b>	<b>9.90%</b>	<b>9.80%</b>	<b>9.50%</b>	<b>9.30%</b>

## CRITICAL SHORTAGE OF GOWNS, LESS THAN ONE-WEEK SUPPLY BY STATE

Provider State	May 31, 2020	June 7, 2020	June 14, 2020	June 21, 2020	June 28, 2020	July 5, 2020	July 12, 2020	July 19, 2020	July 26, 2020	August 2, 2020	August 9, 2020	August 16, 2020	August 23, 2020
AK	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%
AL	22.9%	17.9%	16.1%	15.5%	12.2%	12.1%	16.6%	17.6%	19.3%	21.1%	18.3%	19.1%	21.9%
AR	11.8%	10.6%	8.2%	7.3%	5.0%	3.2%	2.8%	2.3%	3.7%	2.8%	2.3%	4.6%	2.9%
AZ	18.5%	17.1%	14.0%	14.1%	15.1%	13.7%	10.7%	10.7%	16.4%	14.7%	14.6%	12.7%	14.6%
CA	17.9%	15.4%	12.3%	12.2%	10.9%	9.2%	8.2%	8.1%	7.3%	7.4%	6.6%	6.2%	6.6%
CO	30.5%	28.8%	18.6%	15.0%	15.0%	12.6%	14.0%	15.3%	18.0%	17.8%	16.7%	16.7%	12.7%
CT	19.8%	16.7%	12.6%	11.5%	12.0%	13.4%	13.9%	16.2%	16.7%	16.3%	16.2%	15.8%	16.3%
DC	11.8%	5.6%	5.6%	5.3%	0.0%	5.9%	0.0%	0.0%	0.0%	0.0%	5.3%	0.0%	0.0%
DE	17.4%	19.6%	17.4%	15.2%	15.2%	13.0%	13.3%	15.2%	17.8%	15.2%	15.2%	15.2%	13.6%
FL	17.8%	12.6%	7.2%	7.4%	7.7%	8.5%	7.3%	8.5%	9.5%	9.2%	10.4%	9.1%	7.8%
GA	18.8%	17.6%	9.5%	7.4%	8.3%	6.7%	7.2%	8.6%	9.6%	7.1%	6.5%	6.8%	5.1%
GU	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
HI	9.3%	9.3%	11.6%	9.1%	9.1%	11.6%	11.6%	11.6%	7.0%	9.3%	7.0%	4.9%	7.1%
IA	20.0%	20.7%	19.0%	24.2%	25.3%	23.5%	22.2%	28.8%	28.7%	28.7%	27.8%	26.8%	20.5%
ID	20.8%	13.4%	10.0%	11.1%	9.8%	12.2%	8.5%	7.3%	7.3%	4.9%	6.2%	6.2%	8.9%
IL	14.3%	12.0%	8.7%	8.2%	8.2%	7.6%	7.2%	7.5%	8.2%	9.9%	8.7%	7.7%	8.6%
IN	17.1%	15.6%	13.8%	13.5%	12.0%	8.1%	7.2%	8.4%	10.0%	10.2%	9.8%	9.2%	9.0%
KS	20.7%	18.9%	16.4%	17.6%	16.7%	13.0%	12.4%	14.6%	15.8%	14.6%	19.7%	17.2%	15.2%
KY	13.2%	9.8%	9.7%	9.3%	8.3%	8.3%	8.9%	10.0%	10.8%	11.2%	10.1%	11.8%	11.4%
LA	9.5%	5.8%	3.8%	2.7%	2.7%	3.1%	4.3%	5.5%	5.5%	3.9%	6.0%	6.3%	6.1%
MA	16.9%	14.1%	14.3%	13.9%	14.3%	15.9%	14.1%	16.0%	17.0%	16.6%	15.9%	15.0%	10.6%
MD	35.2%	29.8%	19.4%	19.8%	17.5%	15.5%	16.4%	19.2%	19.0%	18.3%	16.5%	20.3%	19.7%
ME	30.4%	29.3%	26.1%	22.8%	21.7%	18.5%	14.1%	17.4%	22.0%	22.8%	23.9%	22.8%	20.9%
MI	19.9%	18.4%	11.9%	12.3%	11.8%	11.8%	11.1%	10.9%	10.7%	11.7%	10.4%	11.2%	8.8%
MN	15.5%	12.1%	10.9%	9.0%	9.9%	10.8%	8.9%	12.2%	14.2%	14.1%	16.1%	15.9%	15.9%
MO	17.9%	14.7%	11.6%	10.1%	9.1%	9.2%	6.7%	6.7%	6.7%	6.9%	7.4%	7.0%	6.4%
MS	15.9%	13.4%	12.5%	9.2%	10.3%	10.4%	11.3%	11.9%	11.6%	15.5%	15.3%	12.7%	13.0%
MT	11.9%	19.1%	20.3%	24.6%	25.0%	23.2%	18.8%	22.9%	20.0%	13.0%	10.1%	8.7%	9.2%
NC	28.5%	26.3%	18.8%	16.4%	15.4%	16.7%	16.3%	16.7%	17.2%	17.8%	17.0%	18.6%	7.7%
ND	13.8%	8.8%	7.5%	6.3%	3.8%	3.8%	5.0%	3.8%	5.0%	7.5%	8.8%	8.9%	10.5%
NE	19.1%	14.7%	13.5%	12.4%	12.5%	12.4%	10.9%	11.3%	9.3%	8.9%	9.9%	8.4%	8.2%
NH	45.9%	47.3%	36.5%	39.7%	32.9%	37.0%	24.7%	47.3%	44.6%	44.6%	44.6%	45.9%	40.5%
NJ	20.6%	16.8%	12.0%	10.6%	10.5%	9.4%	9.6%	11.6%	13.4%	13.6%	13.6%	14.8%	13.6%
NM	49.2%	40.9%	34.3%	35.8%	33.8%	30.9%	30.9%	38.2%	38.2%	43.3%	42.6%	41.2%	45.3%
NV	15.0%	10.9%	6.3%	4.8%	6.8%	3.1%	3.1%	4.7%	7.9%	8.1%	9.4%	6.3%	6.3%
NY	12.1%	9.6%	8.4%	7.0%	6.0%	5.7%	4.1%	6.1%	5.5%	4.9%	3.5%	2.5%	2.0%
OH	16.0%	14.0%	12.4%	11.2%	8.8%	8.1%	9.3%	8.8%	12.3%	12.8%	12.0%	12.5%	11.1%
OK	5.1%	4.9%	3.8%	4.5%	3.4%	2.7%	4.4%	2.4%	5.5%	6.9%	4.1%	9.6%	9.1%
OR	10.6%	10.5%	13.7%	12.8%	8.1%	10.5%	7.3%	12.1%	12.0%	9.9%	9.7%	9.0%	8.7%
PA	16.1%	13.6%	12.7%	10.3%	11.3%	10.6%	9.8%	11.1%	15.0%	16.8%	16.7%	15.8%	15.5%
PR	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
RI	17.1%	17.9%	13.9%	15.4%	12.8%	11.5%	12.7%	15.4%	13.9%	15.4%	16.5%	13.9%	12.8%
SC	15.0%	11.8%	8.1%	9.2%	8.6%	8.2%	8.3%	10.4%	9.4%	10.4%	9.4%	9.3%	8.0%
SD	20.6%	14.6%	15.4%	14.6%	11.7%	9.6%	10.6%	9.7%	9.6%	12.5%	8.7%	9.7%	13.3%
TN	23.4%	20.6%	19.4%	17.3%	17.7%	17.0%	16.3%	14.7%	19.7%	20.8%	17.5%	16.9%	15.3%
TX	13.8%	12.0%	6.0%	4.5%	4.3%	3.2%	3.2%	3.7%	7.3%	6.7%	6.8%	6.1%	5.8%
UT	6.6%	3.2%	3.1%	1.1%	1.1%	3.1%	3.2%	2.2%	3.3%	3.2%	4.2%	3.2%	3.3%
VA	13.4%	10.2%	9.3%	9.6%	10.2%	7.1%	5.3%	17.8%	13.1%	11.0%	8.2%	8.3%	9.1%
VT	25.7%	28.6%	26.5%	23.5%	17.1%	20.0%	20.0%	28.6%	31.4%	25.7%	25.7%	25.7%	27.3%
WA	22.2%	20.4%	19.8%	16.8%	16.4%	15.9%	18.9%	20.9%	20.9%	21.4%	20.5%	18.8%	16.9%
WI	20.3%	17.3%	15.2%	14.6%	14.9%	14.6%	15.2%	14.6%	18.1%	19.1%	19.4%	17.5%	17.0%
WV	39.3%	37.7%	33.6%	32.0%	33.6%	32.8%	32.0%	33.6%	35.2%	34.4%	35.5%	34.2%	34.7%
WY	17.6%	22.9%	11.4%	17.6%	12.1%	9.1%	8.6%	17.6%	18.2%	17.6%	12.1%	15.2%	8.6%
<b>National</b>	<b>17.80%</b>	<b>15.40%</b>	<b>12.20%</b>	<b>11.50%</b>	<b>11.00%</b>	<b>10.20%</b>	<b>9.80%</b>	<b>11.10%</b>	<b>12.30%</b>	<b>12.40%</b>	<b>12.00%</b>	<b>11.80%</b>	<b>10.70%</b>

## CRITICAL SHORTAGE OF EYE PROTECTION, LESS THAN ONE-WEEK SUPPLY BY STATE

Provider State	May 31, 2020	June 7, 2020	June 14, 2020	June 21, 2020	June 28, 2020	July 5, 2020	July 12, 2020	July 19, 2020	July 26, 2020	August 2, 2020	August 9, 2020	August 16, 2020	August 23, 2020
AK	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%
AL	10.3%	10.1%	10.8%	9.3%	9.0%	9.0%	11.9%	15.3%	17.9%	17.5%	18.3%	17.7%	17.2%
AR	10.0%	9.2%	5.9%	5.0%	4.1%	5.0%	3.8%	2.7%	2.7%	2.3%	1.4%	2.3%	2.9%
AZ	11.1%	8.6%	7.7%	6.3%	9.4%	7.2%	6.4%	8.6%	12.1%	11.0%	8.8%	9.2%	10.9%
CA	12.1%	10.6%	8.6%	8.6%	7.9%	6.5%	7.0%	7.3%	6.5%	5.6%	5.1%	5.5%	4.8%
CO	20.2%	17.8%	6.3%	5.5%	5.5%	6.3%	5.9%	9.5%	13.5%	14.2%	11.7%	13.1%	12.3%
CT	2.0%	2.0%	1.0%	1.0%	1.4%	0.5%	0.5%	9.0%	11.0%	14.8%	14.8%	9.6%	11.0%
DC	0.0%	5.6%	0.0%	0.0%	0.0%	5.9%	0.0%	15.8%	10.5%	10.5%	15.8%	10.5%	5.9%
DE	2.2%	2.2%	2.2%	2.2%	4.3%	0.0%	0.0%	15.2%	15.6%	17.4%	15.2%	13.0%	13.6%
FL	10.6%	7.7%	5.2%	5.4%	5.8%	5.1%	5.8%	7.4%	8.6%	7.6%	6.8%	7.2%	7.5%
GA	11.2%	10.4%	7.4%	6.8%	7.1%	6.5%	5.4%	6.8%	6.9%	6.5%	5.3%	5.3%	3.9%
GU	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
HI	4.7%	4.7%	4.7%	6.8%	6.8%	4.7%	4.7%	4.7%	7.0%	7.0%	7.0%	7.3%	7.1%
IA	13.1%	13.2%	12.2%	16.0%	18.3%	18.3%	17.3%	18.9%	19.7%	21.2%	21.4%	22.6%	16.0%
ID	7.8%	3.7%	6.3%	3.7%	3.7%	7.3%	6.1%	7.3%	7.3%	7.4%	9.9%	9.9%	10.1%
IL	4.3%	4.6%	3.0%	2.6%	2.6%	2.9%	3.2%	3.5%	4.2%	5.2%	5.1%	4.4%	4.6%
IN	9.0%	8.1%	7.6%	7.0%	5.8%	5.4%	4.9%	6.1%	7.1%	7.5%	6.9%	7.1%	7.1%
KS	15.2%	14.9%	13.6%	13.0%	13.0%	10.2%	9.9%	11.8%	11.8%	10.2%	10.6%	9.1%	7.6%
KY	4.1%	2.9%	1.8%	2.5%	1.4%	1.8%	2.8%	8.2%	8.6%	9.0%	8.6%	9.3%	9.2%
LA	3.2%	2.3%	1.5%	0.8%	1.6%	2.0%	3.1%	2.4%	2.0%	2.4%	2.8%	4.0%	2.8%
MA	6.4%	6.2%	5.9%	6.3%	6.2%	7.0%	4.1%	11.7%	14.6%	14.1%	14.8%	13.4%	9.8%
MD	12.1%	10.6%	4.2%	4.6%	6.0%	6.4%	6.8%	13.2%	14.5%	13.7%	14.2%	17.1%	17.4%
ME	20.7%	20.7%	21.7%	17.4%	19.6%	20.7%	19.6%	33.7%	36.3%	37.0%	39.1%	38.0%	37.4%
MI	8.1%	7.7%	4.7%	4.7%	5.4%	5.6%	5.8%	5.1%	6.6%	8.0%	7.8%	7.6%	7.1%
MN	6.4%	4.8%	4.8%	3.4%	3.7%	4.4%	4.7%	6.9%	5.6%	6.5%	6.6%	6.4%	6.1%
MO	6.5%	5.8%	4.1%	4.4%	3.7%	4.1%	2.0%	2.8%	2.6%	3.6%	3.2%	2.8%	2.9%
MS	9.9%	9.6%	8.3%	7.2%	6.7%	7.3%	7.7%	9.3%	10.0%	11.4%	9.5%	9.0%	9.2%
MT	11.9%	14.7%	14.5%	20.3%	22.1%	14.5%	13.0%	21.4%	15.7%	7.2%	5.8%	5.8%	3.1%
NC	16.5%	18.3%	10.9%	8.7%	8.9%	8.9%	10.8%	13.1%	13.6%	14.5%	14.8%	15.6%	4.9%
ND	8.8%	7.5%	5.0%	3.8%	3.8%	3.8%	5.0%	3.8%	5.0%	7.5%	10.0%	7.6%	7.9%
NE	5.9%	4.2%	2.1%	4.7%	5.7%	5.2%	4.1%	4.1%	6.7%	6.3%	7.8%	7.3%	6.0%
NH	5.4%	8.1%	6.8%	6.8%	6.8%	9.6%	2.7%	45.9%	43.2%	45.9%	45.9%	44.6%	39.2%
NJ	3.4%	3.0%	1.8%	1.5%	2.0%	0.9%	1.5%	9.3%	9.3%	9.2%	9.9%	9.6%	8.6%
NM	3.2%	4.5%	0.0%	3.0%	0.0%	0.0%	0.0%	35.3%	38.2%	38.8%	39.7%	39.7%	40.6%
NV	5.0%	4.7%	1.6%	6.3%	5.1%	3.1%	3.1%	4.7%	4.8%	4.8%	4.7%	3.2%	3.1%
NY	3.2%	2.6%	2.5%	2.5%	1.5%	1.3%	1.8%	1.6%	2.3%	1.5%	2.6%	1.7%	1.6%
OH	6.2%	5.3%	4.9%	5.1%	4.7%	5.1%	4.9%	5.7%	6.7%	7.4%	7.8%	7.8%	6.8%
OK	1.8%	1.4%	1.4%	2.1%	1.7%	1.0%	3.1%	1.4%	2.4%	2.1%	1.7%	3.1%	2.2%
OR	4.1%	4.8%	4.8%	6.4%	3.2%	8.1%	4.0%	10.5%	9.6%	7.4%	8.1%	6.6%	6.1%
PA	5.3%	5.1%	5.3%	3.6%	4.3%	2.9%	2.8%	8.2%	13.0%	13.4%	13.2%	13.2%	13.9%
PR	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	16.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
RI	1.3%	2.6%	3.8%	2.6%	2.6%	1.3%	2.5%	12.8%	11.4%	11.5%	12.7%	12.7%	10.3%
SC	12.2%	9.1%	5.4%	8.6%	6.5%	3.3%	4.4%	7.1%	6.1%	6.6%	5.0%	5.5%	4.0%
SD	6.9%	5.8%	7.7%	5.8%	5.8%	5.8%	5.8%	6.8%	7.7%	6.7%	3.8%	3.9%	6.1%
TN	13.6%	11.9%	10.0%	9.6%	8.4%	10.6%	9.6%	11.5%	14.5%	12.7%	12.9%	9.1%	9.3%
TX	8.5%	7.7%	2.7%	2.5%	2.8%	2.3%	2.4%	2.3%	11.0%	10.7%	10.6%	10.4%	11.6%
UT	1.1%	2.1%	3.1%	1.1%	2.1%	3.1%	1.1%	1.1%	2.2%	2.1%	3.1%	2.1%	2.2%
VA	9.3%	6.2%	5.3%	6.0%	6.0%	3.5%	4.3%	11.0%	7.8%	7.1%	4.3%	5.4%	4.6%
VT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.6%	28.6%	25.7%	25.7%	25.7%	27.3%
WA	11.9%	12.4%	12.9%	13.4%	11.9%	12.4%	11.9%	14.9%	13.4%	16.3%	14.5%	12.4%	10.1%
WI	7.5%	6.1%	4.3%	5.4%	5.7%	6.6%	5.4%	7.2%	10.3%	9.7%	10.0%	11.2%	10.4%
WV	9.0%	7.4%	4.1%	5.7%	4.9%	4.1%	4.9%	32.8%	32.8%	32.0%	32.2%	30.0%	30.5%
WY	17.6%	17.1%	8.6%	11.8%	9.1%	6.1%	5.7%	11.8%	9.1%	8.8%	9.1%	9.1%	8.6%
<b>National</b>	<b>8.40%</b>	<b>7.60%</b>	<b>5.70%</b>	<b>5.70%</b>	<b>5.60%</b>	<b>5.40%</b>	<b>5.30%</b>	<b>8.00%</b>	<b>9.40%</b>	<b>9.50%</b>	<b>9.30%</b>	<b>9.20%</b>	<b>8.40%</b>

## CRITICAL SHORTAGE OF GLOVES, NO ONE-WEEK SUPPLY BY STATE

Provider State	May 31, 2020	June 7, 2020	June 14, 2020	June 21, 2020	June 28, 2020	July 5, 2020	July 12, 2020	July 19, 2020	July 26, 2020	August 2, 2020	August 9, 2020	August 16, 2020	August 23, 2020
AK	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%
AL	3.6%	3.7%	4.5%	3.1%	3.2%	4.9%	7.3%	6.9%	9.2%	8.1%	6.9%	10.5%	7.4%
AR	3.8%	4.1%	3.2%	3.2%	4.1%	3.7%	1.9%	1.8%	2.7%	3.7%	1.8%	3.7%	1.5%
AZ	4.4%	4.3%	2.8%	2.8%	4.3%	3.6%	2.9%	4.3%	2.9%	2.9%	3.6%	3.5%	3.6%
CA	10.8%	10.7%	8.6%	8.5%	8.3%	7.9%	7.9%	7.8%	6.7%	7.8%	5.9%	6.4%	5.9%
CO	14.1%	13.2%	3.6%	2.7%	2.7%	3.6%	4.1%	4.1%	5.0%	4.6%	5.4%	3.6%	4.2%
CT	3.0%	3.0%	1.9%	1.0%	1.9%	1.4%	1.9%	0.5%	2.4%	6.2%	6.2%	6.2%	7.2%
DC	5.9%	0.0%	0.0%	5.3%	5.3%	17.6%	5.3%	0.0%	0.0%	5.3%	5.3%	0.0%	5.9%
DE	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	2.2%	6.7%	6.5%	2.2%	0.0%	0.0%
FL	5.9%	4.7%	3.6%	3.4%	3.7%	4.0%	3.0%	3.5%	4.9%	4.0%	4.4%	3.9%	3.5%
GA	7.3%	9.0%	4.2%	3.8%	4.2%	4.4%	4.2%	4.7%	6.3%	3.9%	3.5%	4.1%	3.6%
GU	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
HI	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	4.7%	4.7%	4.7%	4.7%	2.3%	2.4%	2.4%
IA	3.8%	3.3%	3.3%	4.9%	8.0%	7.7%	6.6%	8.5%	8.1%	7.1%	8.2%	8.6%	11.2%
ID	1.3%	2.4%	2.5%	1.2%	1.2%	2.4%	1.2%	1.2%	3.7%	1.2%	4.9%	4.9%	5.1%
IL	5.2%	4.6%	2.9%	2.5%	3.0%	2.7%	2.9%	2.7%	4.8%	4.6%	4.1%	4.2%	4.1%
IN	4.1%	4.6%	3.5%	3.3%	3.9%	3.3%	3.5%	3.6%	4.2%	5.8%	5.0%	4.2%	3.5%
KS	10.5%	9.3%	8.4%	8.7%	8.6%	7.7%	8.4%	9.0%	8.4%	9.0%	9.1%	8.5%	6.6%
KY	1.1%	1.8%	1.1%	1.1%	0.7%	2.5%	3.2%	2.9%	2.9%	3.2%	4.0%	4.6%	3.7%
LA	2.0%	1.2%	1.1%	1.1%	1.2%	1.2%	2.7%	3.5%	2.8%	2.4%	4.0%	3.6%	3.2%
MA	3.3%	2.7%	2.4%	2.2%	2.4%	3.2%	2.7%	3.0%	3.0%	3.0%	3.3%	3.0%	2.8%
MD	11.1%	13.0%	4.6%	6.5%	8.3%	8.7%	7.3%	8.2%	8.6%	9.6%	9.2%	7.2%	7.3%
ME	7.6%	9.8%	6.5%	3.3%	5.4%	6.5%	4.3%	7.6%	9.9%	7.6%	6.5%	5.4%	6.6%
MI	7.3%	7.5%	5.2%	5.2%	5.2%	5.4%	4.1%	4.4%	3.9%	3.9%	4.4%	4.4%	4.1%
MN	4.7%	4.0%	2.5%	2.5%	3.1%	4.2%	3.9%	3.6%	4.2%	4.8%	5.0%	5.0%	6.7%
MO	2.2%	2.2%	1.8%	2.4%	2.4%	2.7%	3.6%	2.9%	4.0%	3.6%	3.6%	3.0%	3.9%
MS	8.2%	8.0%	4.7%	6.7%	6.7%	7.8%	6.7%	7.2%	8.4%	10.9%	7.9%	7.9%	10.3%
MT	0.0%	1.5%	0.0%	7.2%	7.4%	5.8%	8.7%	11.4%	11.4%	7.2%	7.2%	5.8%	6.2%
NC	10.1%	10.7%	6.0%	5.1%	5.3%	5.3%	6.5%	2.4%	3.9%	3.4%	3.0%	4.6%	3.0%
ND	2.5%	1.3%	3.8%	1.3%	2.5%	1.3%	3.8%	2.5%	3.8%	5.0%	8.8%	3.8%	9.2%
NE	2.1%	2.6%	3.1%	2.1%	4.7%	3.6%	5.2%	3.1%	4.7%	4.2%	4.7%	6.8%	4.9%
NH	5.4%	4.1%	1.4%	1.4%	1.4%	5.5%	1.4%	2.7%	2.7%	1.4%	2.7%	5.4%	4.1%
NJ	1.9%	1.5%	1.5%	2.6%	1.8%	0.9%	1.2%	1.7%	2.6%	2.9%	2.0%	1.5%	1.2%
NM	1.6%	1.5%	1.5%	3.0%	2.9%	1.5%	1.5%	4.4%	1.5%	6.0%	5.9%	2.9%	7.8%
NV	1.7%	1.6%	0.0%	1.6%	0.0%	0.0%	1.5%	3.1%	3.2%	1.6%	1.6%	4.8%	1.6%
NY	3.6%	4.7%	4.1%	4.3%	4.3%	4.5%	3.6%	4.1%	4.0%	3.1%	4.1%	3.2%	2.7%
OH	3.1%	3.6%	3.7%	3.5%	3.6%	4.4%	4.2%	4.1%	5.5%	6.1%	5.1%	5.8%	4.7%
OK	1.8%	1.7%	2.1%	3.1%	3.8%	2.4%	4.4%	1.7%	2.7%	4.5%	3.4%	7.9%	9.1%
OR	0.8%	0.8%	2.4%	2.4%	0.8%	4.8%	4.8%	4.8%	4.0%	5.0%	5.6%	4.1%	5.2%
PA	4.2%	3.1%	3.0%	2.1%	2.6%	2.9%	3.5%	3.2%	4.0%	4.1%	4.3%	3.5%	3.4%
PR	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	0.0%
RI	2.6%	3.8%	2.5%	2.6%	0.0%	1.3%	1.3%	1.3%	1.3%	1.3%	5.1%	3.8%	1.3%
SC	3.3%	2.7%	0.0%	1.6%	2.2%	1.1%	2.2%	2.7%	0.6%	3.3%	2.8%	5.5%	3.4%
SD	1.0%	0.0%	1.0%	0.0%	1.9%	1.0%	3.8%	5.8%	2.9%	4.8%	6.7%	5.8%	6.1%
TN	9.4%	7.7%	7.7%	7.1%	7.7%	7.4%	8.0%	7.1%	9.0%	9.4%	8.4%	7.8%	9.6%
TX	6.7%	6.6%	1.4%	1.2%	2.1%	2.1%	2.1%	2.3%	3.2%	3.4%	2.9%	3.0%	2.5%
UT	0.0%	1.1%	1.0%	1.1%	1.1%	3.1%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%
VA	3.7%	2.5%	3.6%	1.8%	2.8%	1.4%	1.1%	3.6%	3.9%	2.1%	2.1%	2.2%	1.9%
VT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	2.9%	0.0%	2.9%	2.9%	3.0%
WA	3.6%	7.0%	6.9%	5.4%	5.5%	8.0%	7.5%	9.5%	8.0%	9.2%	10.0%	7.9%	10.1%
WI	5.8%	4.0%	2.6%	3.4%	3.7%	3.7%	3.7%	3.4%	5.2%	5.1%	6.0%	4.0%	3.6%
WV	5.7%	4.9%	0.8%	1.6%	2.5%	1.6%	3.3%	2.5%	3.3%	4.1%	2.5%	4.2%	2.5%
WY	5.9%	8.6%	2.9%	2.9%	3.0%	3.0%	2.9%	8.8%	6.1%	11.8%	6.1%	6.1%	2.9%
<b>National</b>	<b>5.30%</b>	<b>5.20%</b>	<b>3.60%</b>	<b>3.60%</b>	<b>4.00%</b>	<b>4.10%</b>	<b>4.10%</b>	<b>4.20%</b>	<b>4.80%</b>	<b>5.00%</b>	<b>4.80%</b>	<b>4.80%</b>	<b>4.60%</b>

## CRITICAL SHORTAGE OF HAND SANITIZER, NO ONE-WEEK SUPPLY BY STATE

Provider State	May 31, 2020	June 7, 2020	June 14, 2020	June 21, 2020	June 28, 2020	July 5, 2020	July 12, 2020	July 19, 2020	July 26, 2020	August 2, 2020	August 9, 2020	August 16, 2020	August 23, 2020
AK	5.6%	5.9%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	5.3%	0.0%
AL	7.6%	7.8%	9.4%	7.1%	5.9%	7.2%	8.3%	8.3%	11.9%	9.9%	8.7%	8.6%	6.5%
AR	2.8%	2.8%	2.7%	3.6%	3.2%	3.7%	2.4%	1.8%	2.7%	2.8%	1.8%	2.7%	1.5%
AZ	7.4%	5.0%	4.2%	3.5%	5.0%	3.6%	3.6%	2.9%	5.0%	5.1%	5.1%	4.9%	5.1%
CA	13.4%	13.2%	11.0%	10.5%	10.1%	8.5%	8.7%	7.9%	7.2%	7.1%	6.2%	6.1%	5.7%
CO	14.6%	13.7%	4.1%	3.2%	3.6%	3.2%	3.6%	3.6%	5.4%	5.9%	6.8%	5.4%	4.2%
CT	2.0%	3.0%	1.4%	0.5%	1.4%	0.5%	1.4%	0.5%	1.4%	6.2%	6.2%	5.3%	7.2%
DC	5.9%	5.6%	5.6%	5.3%	5.3%	11.8%	5.3%	0.0%	0.0%	0.0%	5.3%	0.0%	0.0%
DE	2.2%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%	2.2%	4.3%	0.0%	0.0%	0.0%
FL	5.9%	3.9%	3.4%	3.4%	3.4%	3.4%	3.3%	3.6%	4.7%	3.8%	3.7%	3.6%	2.7%
GA	7.6%	10.7%	6.5%	5.0%	5.3%	4.1%	3.9%	5.6%	6.6%	4.7%	4.7%	3.8%	3.3%
GU	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
HI	4.7%	2.3%	4.7%	2.3%	4.5%	2.3%	4.7%	2.3%	2.3%	4.7%	2.3%	4.9%	7.1%
IA	11.2%	11.1%	11.0%	13.2%	13.8%	14.3%	13.1%	14.4%	14.0%	14.1%	14.4%	14.3%	8.0%
ID	2.6%	3.7%	2.5%	2.5%	1.2%	2.4%	0.0%	1.2%	2.4%	1.2%	2.5%	2.5%	2.5%
IL	3.8%	3.9%	2.9%	1.7%	2.0%	1.7%	1.9%	1.9%	3.6%	3.2%	3.2%	3.2%	3.1%
IN	3.7%	4.2%	3.1%	2.5%	2.7%	2.3%	2.1%	2.9%	3.3%	3.6%	4.0%	3.7%	2.6%
KS	10.6%	9.3%	9.3%	8.7%	9.0%	7.4%	8.1%	9.7%	7.8%	8.7%	7.2%	6.9%	5.3%
KY	0.8%	1.1%	0.7%	0.7%	0.4%	1.4%	1.4%	1.1%	1.1%	1.1%	1.4%	2.1%	1.8%
LA	4.3%	1.9%	2.7%	1.5%	1.6%	2.7%	3.9%	3.5%	1.6%	2.4%	2.8%	3.2%	2.0%
MA	5.8%	4.9%	4.9%	4.6%	5.7%	5.4%	3.5%	3.0%	3.0%	2.7%	2.7%	2.5%	2.8%
MD	20.6%	21.2%	15.3%	16.6%	15.2%	15.5%	14.2%	14.6%	13.1%	16.0%	15.6%	14.4%	13.8%
ME	6.5%	7.6%	6.5%	2.2%	3.3%	7.7%	4.3%	5.4%	5.5%	4.3%	6.5%	5.4%	5.5%
MI	8.6%	8.5%	5.2%	4.9%	5.9%	5.4%	4.8%	5.6%	6.1%	4.9%	4.9%	4.6%	4.4%
MN	8.5%	6.8%	6.7%	5.0%	5.4%	7.2%	5.0%	6.6%	7.0%	7.3%	10.0%	8.6%	6.4%
MO	4.5%	4.2%	2.2%	3.8%	1.6%	2.5%	2.8%	2.4%	2.6%	3.2%	3.4%	2.8%	2.7%
MS	8.2%	9.6%	7.3%	7.2%	6.2%	7.8%	7.7%	7.7%	6.8%	10.4%	7.4%	6.3%	7.1%
MT	0.0%	0.0%	1.4%	2.9%	7.4%	4.3%	5.8%	4.3%	4.3%	0.0%	0.0%	2.9%	1.5%
NC	10.4%	11.0%	6.3%	6.7%	6.7%	5.8%	5.8%	2.7%	3.4%	3.6%	3.7%	4.4%	3.0%
ND	5.0%	3.8%	6.3%	2.5%	2.5%	2.5%	5.0%	2.5%	5.0%	6.3%	8.8%	2.5%	3.9%
NE	3.2%	4.2%	1.6%	1.6%	1.6%	2.6%	0.5%	1.0%	2.1%	1.6%	2.1%	1.0%	1.6%
NH	5.4%	5.4%	2.7%	1.4%	1.4%	5.5%	1.4%	2.7%	2.7%	4.1%	2.7%	4.1%	4.1%
NJ	2.8%	1.8%	2.7%	2.9%	3.2%	2.6%	2.9%	3.5%	3.5%	2.0%	2.6%	1.5%	1.2%
NM	1.6%	3.0%	1.5%	3.0%	2.9%	1.5%	0.0%	0.0%	1.5%	3.0%	5.9%	5.9%	6.3%
NV	3.3%	1.6%	1.6%	3.2%	1.7%	1.6%	1.5%	3.1%	4.8%	3.2%	3.1%	3.2%	3.1%
NY	4.1%	4.3%	4.1%	3.7%	3.7%	3.3%	2.6%	1.8%	2.7%	1.8%	2.6%	1.5%	1.6%
OH	4.8%	5.2%	4.5%	3.8%	3.8%	2.8%	3.5%	3.3%	3.3%	4.1%	3.7%	4.0%	3.7%
OK	2.6%	2.1%	1.7%	1.7%	2.7%	2.0%	3.1%	2.7%	6.2%	5.9%	3.4%	7.2%	8.0%
OR	1.6%	0.8%	2.4%	3.2%	1.6%	4.8%	3.2%	2.4%	4.8%	2.5%	1.6%	1.6%	3.5%
PA	4.3%	3.4%	3.9%	2.7%	3.4%	2.8%	2.3%	2.9%	3.5%	3.6%	3.2%	2.9%	3.0%
PR	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
RI	1.3%	0.0%	2.5%	1.3%	1.3%	1.3%	2.5%	1.3%	1.3%	1.3%	3.8%	2.5%	1.3%
SC	5.0%	5.3%	2.2%	2.2%	2.7%	2.2%	1.1%	1.6%	1.7%	3.3%	2.8%	3.8%	2.3%
SD	1.0%	0.0%	1.9%	0.0%	1.9%	1.9%	1.0%	1.9%	1.0%	1.0%	0.0%	1.0%	3.1%
TN	11.7%	10.3%	9.7%	8.3%	7.7%	7.4%	7.7%	6.7%	8.4%	8.1%	7.8%	6.5%	7.0%
TX	7.3%	6.5%	2.0%	1.9%	2.1%	1.9%	2.3%	2.4%	1.9%	1.6%	1.8%	2.2%	1.6%
UT	0.0%	1.1%	2.1%	1.1%	1.1%	3.1%	1.1%	1.1%	1.1%	1.1%	2.1%	1.1%	1.1%
VA	4.1%	3.6%	5.3%	3.2%	3.9%	2.1%	1.8%	5.3%	5.3%	3.9%	2.8%	1.8%	1.1%
VT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	2.9%	0.0%	0.0%	0.0%	3.0%
WA	9.8%	7.0%	7.4%	6.4%	7.0%	6.0%	7.5%	9.5%	8.5%	7.7%	8.5%	5.9%	7.9%
WI	6.7%	6.1%	4.6%	4.9%	4.6%	4.3%	4.0%	3.2%	3.2%	3.4%	4.3%	4.0%	4.8%
WV	4.9%	4.1%	0.8%	1.6%	3.3%	2.5%	4.9%	2.5%	4.9%	5.7%	4.1%	3.3%	2.5%
WY	5.9%	8.6%	0.0%	2.9%	3.0%	0.0%	0.0%	5.9%	9.1%	2.9%	3.0%	6.1%	2.9%
<b>National</b>	<b>6.60%</b>	<b>6.30%</b>	<b>4.90%</b>	<b>4.50%</b>	<b>4.60%</b>	<b>4.40%</b>	<b>4.20%</b>	<b>4.30%</b>	<b>4.70%</b>	<b>4.60%</b>	<b>4.60%</b>	<b>4.40%</b>	<b>3.90%</b>

## NO N95 MASKS BY STATE

Provider State	May 31, 2020	June 7, 2020	June 14, 2020	June 21, 2020	June 28, 2020	July 5, 2020	July 12, 2020	July 19, 2020	July 26, 2020	August 2, 2020	August 9, 2020	August 16, 2020	August 23, 2020
AK	5.6%	5.9%	5.9%	10.0%	15.0%	10.0%	10.0%	10.5%	10.0%	10.0%	10.0%	10.5%	5.9%
AL	2.2%	2.8%	0.9%	1.3%	1.8%	1.8%	2.6%	8.3%	9.6%	9.0%	8.7%	9.5%	9.3%
AR	5.2%	5.0%	4.6%	5.0%	5.9%	5.0%	2.4%	4.6%	4.6%	4.1%	4.1%	3.2%	3.4%
AZ	0.7%	2.9%	3.5%	2.1%	2.2%	1.4%	0.0%	4.3%	7.1%	7.4%	7.3%	5.6%	6.6%
CA	1.0%	1.0%	0.3%	0.3%	0.4%	0.3%	0.5%	0.4%	0.6%	0.5%	0.6%	0.5%	0.5%
CO	13.6%	13.2%	1.8%	2.3%	1.8%	2.3%	3.2%	8.6%	9.5%	10.0%	9.0%	8.6%	8.0%
CT	1.5%	2.5%	1.0%	0.5%	1.0%	0.5%	0.5%	9.5%	9.6%	10.0%	10.0%	8.6%	9.6%
DC	0.0%	0.0%	0.0%	0.0%	0.0%	5.9%	0.0%	0.0%	5.3%	5.3%	10.5%	5.3%	5.9%
DE	2.2%	4.3%	0.0%	0.0%	2.2%	0.0%	2.2%	17.4%	20.0%	19.6%	21.7%	15.2%	15.9%
FL	2.2%	2.0%	1.6%	1.8%	1.3%	0.7%	0.8%	4.1%	4.7%	4.6%	5.0%	4.6%	4.1%
GA	5.8%	5.4%	0.6%	0.6%	0.6%	0.6%	0.9%	2.9%	4.5%	3.6%	3.2%	3.0%	2.4%
GU	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
HI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.0%	7.0%	11.6%	12.2%	11.9%
IA	10.0%	9.6%	9.6%	10.1%	4.2%	11.3%	11.2%	13.9%	14.2%	13.6%	14.4%	15.7%	8.5%
ID	1.3%	1.2%	2.5%	1.2%	1.2%	1.2%	2.4%	4.9%	7.3%	4.9%	6.2%	6.2%	7.6%
IL	4.0%	3.5%	2.9%	2.6%	2.2%	1.9%	2.2%	3.9%	4.8%	4.9%	5.1%	5.0%	5.0%
IN	1.0%	1.2%	1.6%	1.0%	0.8%	1.0%	1.2%	2.1%	2.5%	2.3%	3.1%	3.8%	3.7%
KS	5.0%	4.3%	4.3%	5.3%	4.3%	3.4%	3.4%	4.7%	4.7%	7.8%	6.6%	3.4%	3.6%
KY	1.5%	1.1%	1.8%	2.2%	1.4%	1.4%	2.1%	8.2%	11.1%	10.8%	10.4%	10.4%	10.7%
LA	3.6%	3.8%	4.6%	3.1%	3.5%	2.0%	3.9%	5.1%	5.5%	7.5%	7.1%	7.1%	5.7%
MA	3.9%	3.0%	2.7%	2.7%	3.5%	3.8%	3.5%	11.9%	17.6%	18.2%	18.4%	15.6%	11.5%
MD	6.0%	6.3%	0.0%	0.0%	0.0%	0.5%	0.0%	8.2%	8.1%	8.7%	9.2%	11.3%	11.9%
ME	6.5%	4.3%	4.3%	3.3%	2.2%	2.2%	2.2%	15.2%	19.8%	21.7%	22.8%	21.7%	22.0%
MI	7.6%	7.2%	6.0%	5.2%	5.7%	4.9%	4.8%	5.1%	6.1%	11.7%	10.7%	10.7%	10.0%
MN	6.7%	6.8%	5.3%	5.6%	4.8%	4.4%	4.5%	3.3%	4.2%	4.0%	7.5%	7.0%	7.0%
MO	2.2%	3.0%	2.0%	2.2%	1.4%	1.4%	1.6%	2.4%	4.2%	2.4%	2.8%	3.0%	2.7%
MS	4.4%	2.7%	1.6%	0.5%	1.0%	1.0%	1.0%	2.1%	2.6%	2.6%	3.2%	2.6%	3.3%
MT	3.0%	2.9%	2.9%	2.9%	4.4%	4.3%	2.9%	2.9%	4.3%	2.9%	2.9%	2.9%	0.0%
NC	14.6%	13.7%	8.9%	7.0%	7.5%	7.2%	7.0%	9.2%	17.2%	27.2%	26.4%	24.4%	20.7%
ND	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	3.8%	12.5%	11.4%	10.5%
NE	1.6%	1.0%	1.0%	1.6%	2.1%	1.5%	1.6%	2.6%	3.6%	3.1%	5.7%	5.2%	4.3%
NH	1.4%	1.4%	0.0%	0.0%	0.0%	4.1%	0.0%	37.8%	40.5%	40.5%	40.5%	39.2%	37.8%
NJ	2.2%	3.0%	2.7%	3.2%	2.9%	2.3%	2.3%	12.2%	17.2%	16.5%	16.5%	15.1%	15.4%
NM	3.2%	1.5%	1.5%	1.5%	0.0%	0.0%	1.5%	36.8%	39.7%	40.3%	39.7%	41.2%	40.6%
NV	3.3%	4.7%	3.1%	3.2%	1.7%	3.1%	3.1%	1.6%	3.2%	1.6%	1.6%	1.6%	4.7%
NY	1.2%	0.9%	1.0%	1.0%	1.5%	1.3%	2.1%	2.3%	2.5%	1.6%	2.5%	2.0%	2.0%
OH	2.7%	2.3%	2.4%	2.4%	2.0%	2.9%	3.0%	5.7%	9.9%	12.0%	12.5%	12.0%	12.0%
OK	6.2%	5.6%	6.3%	5.5%	6.5%	5.8%	6.8%	6.8%	4.8%	5.9%	6.2%	6.2%	5.8%
OR	0.0%	0.0%	0.0%	0.8%	0.0%	1.6%	0.0%	1.6%	0.8%	0.8%	0.8%	0.8%	1.7%
PA	1.1%	0.9%	1.1%	0.8%	0.9%	0.9%	1.1%	6.8%	9.7%	10.3%	10.1%	9.4%	9.1%
PR	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
RI	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.3%	11.4%	12.8%	12.7%	12.7%	10.3%
SC	7.8%	7.5%	6.5%	6.5%	6.5%	6.0%	6.1%	8.8%	8.3%	7.7%	7.8%	9.3%	9.7%
SD	2.0%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	3.9%	2.9%	3.8%	5.8%	4.9%	9.2%
TN	4.9%	3.9%	2.6%	2.6%	2.6%	2.9%	2.6%	4.2%	6.8%	7.5%	5.8%	6.8%	5.3%
TX	6.5%	6.1%	1.5%	1.6%	1.8%	1.5%	1.4%	1.7%	10.4%	10.1%	10.3%	10.3%	10.9%
UT	0.0%	1.1%	1.0%	0.0%	0.0%	1.0%	0.0%	1.1%	1.1%	1.1%	2.1%	1.1%	1.1%
VA	2.2%	2.2%	2.8%	1.4%	1.8%	1.1%	2.1%	6.8%	7.4%	7.1%	7.1%	7.2%	6.8%
VT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.6%	28.6%	25.7%	25.7%	25.7%	30.3%
WA	2.1%	1.0%	2.5%	0.0%	0.0%	0.0%	1.0%	3.5%	2.5%	3.6%	4.5%	4.0%	4.2%
WI	7.0%	5.2%	2.6%	2.3%	2.3%	2.6%	2.6%	3.7%	5.7%	6.6%	7.1%	6.9%	7.7%
WV	3.3%	3.3%	0.8%	0.8%	0.8%	0.0%	1.6%	29.5%	31.1%	30.3%	30.6%	30.0%	31.4%
WY	11.8%	8.6%	5.7%	2.9%	6.1%	3.0%	2.9%	14.7%	3.0%	2.9%	3.0%	6.1%	5.7%
<b>National</b>	<b>4.0%</b>	<b>3.8%</b>	<b>2.6%</b>	<b>2.4%</b>	<b>2.3%</b>	<b>2.3%</b>	<b>2.5%</b>	<b>5.6%</b>	<b>7.7%</b>	<b>8.3%</b>	<b>8.5%</b>	<b>8.2%</b>	<b>7.8%</b>

## NO SURGICAL MASKS BY STATE

Provider State	May 31, 2020	June 7, 2020	June 14, 2020	June 21, 2020	June 28, 2020	July 5, 2020	July 12, 2020	July 19, 2020	July 26, 2020	August 2, 2020	August 9, 2020	August 16, 2020	August 23, 2020
AK	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AL	1.8%	2.3%	0.4%	0.9%	1.4%	0.9%	1.6%	6.9%	8.7%	8.5%	8.7%	10.0%	8.8%
AR	0.9%	0.9%	0.5%	0.5%	0.5%	0.9%	0.0%	0.0%	0.0%	0.5%	0.5%	0.0%	0.0%
AZ	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	5.0%	5.1%	5.1%	4.2%	4.4%
CA	0.5%	0.7%	0.2%	0.2%	0.1%	0.3%	0.3%	0.3%	0.3%	0.3%	0.5%	0.3%	0.2%
CO	12.2%	11.4%	0.9%	0.9%	0.5%	0.9%	1.4%	7.2%	7.7%	8.2%	7.2%	7.2%	7.1%
CT	1.5%	2.0%	1.0%	0.5%	1.0%	1.0%	1.0%	9.5%	9.1%	9.1%	9.5%	8.6%	9.1%
DC	0.0%	0.0%	0.0%	0.0%	0.0%	5.9%	0.0%	0.0%	5.3%	5.3%	10.5%	5.3%	5.9%
DE	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	15.2%	17.8%	17.4%	17.4%	15.2%	13.6%
FL	0.5%	0.9%	0.4%	0.3%	0.4%	0.4%	0.3%	2.3%	3.8%	3.5%	3.3%	2.8%	2.7%
GA	4.9%	4.8%	0.3%	0.6%	0.6%	0.3%	0.3%	0.6%	1.2%	1.2%	0.9%	0.9%	0.6%
GU	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
HI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	14.0%	14.0%	14.0%	14.6%	14.3%
IA	9.1%	8.5%	8.2%	8.9%	2.1%	9.2%	9.6%	11.1%	11.4%	11.3%	12.2%	13.3%	6.4%
ID	0.0%	0.0%	1.3%	0.0%	0.0%	1.2%	1.2%	3.7%	4.9%	3.7%	3.7%	3.7%	5.1%
IL	0.7%	1.2%	0.4%	0.6%	0.4%	0.1%	0.6%	1.2%	1.9%	2.0%	1.9%	1.5%	1.8%
IN	0.6%	1.0%	0.2%	1.0%	0.2%	0.2%	0.4%	1.3%	1.3%	1.5%	1.9%	1.2%	1.2%
KS	2.8%	3.4%	2.5%	2.8%	1.9%	1.9%	1.9%	2.5%	2.2%	5.9%	4.4%	2.2%	2.3%
KY	0.4%	0.7%	0.7%	1.4%	0.4%	0.4%	1.4%	6.4%	6.8%	7.2%	6.8%	8.2%	7.0%
LA	0.4%	0.0%	0.4%	0.0%	0.0%	0.4%	1.6%	0.4%	0.0%	0.8%	0.8%	0.8%	0.0%
MA	0.3%	0.0%	0.0%	0.0%	0.0%	0.8%	0.5%	8.4%	11.4%	11.7%	12.1%	10.9%	8.1%
MD	6.0%	6.3%	0.0%	0.0%	0.0%	0.5%	0.5%	8.7%	8.6%	8.2%	8.3%	11.7%	11.9%
ME	1.1%	0.0%	1.1%	1.1%	0.0%	0.0%	0.0%	15.2%	16.5%	16.3%	16.3%	16.3%	16.5%
MI	1.8%	1.5%	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.7%	2.9%	3.2%	2.9%	2.4%
MN	0.6%	0.3%	1.1%	0.8%	0.6%	1.4%	1.4%	1.1%	2.2%	2.5%	4.7%	4.7%	4.3%
MO	0.4%	1.4%	0.4%	0.6%	0.4%	0.4%	0.8%	0.8%	1.8%	1.4%	1.6%	1.6%	1.9%
MS	1.6%	1.1%	0.5%	0.0%	0.5%	1.6%	0.5%	0.0%	0.0%	2.1%	1.1%	0.0%	1.1%
MT	4.5%	4.4%	4.3%	4.3%	4.4%	5.8%	4.3%	4.3%	5.7%	2.9%	1.4%	0.0%	0.0%
NC	8.1%	7.3%	1.0%	0.5%	1.2%	1.4%	1.4%	3.4%	3.9%	11.6%	11.3%	12.5%	11.6%
ND	1.3%	1.3%	1.3%	1.3%	2.5%	1.3%	1.3%	1.3%	2.5%	2.5%	8.8%	6.3%	6.6%
NE	0.5%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.5%	1.0%	1.0%	2.1%	1.0%	0.5%
NH	1.4%	1.4%	0.0%	0.0%	0.0%	2.7%	0.0%	36.5%	39.2%	39.2%	39.2%	39.2%	36.5%
NJ	0.3%	0.3%	0.3%	0.6%	0.3%	0.3%	0.9%	9.0%	9.0%	9.0%	9.6%	9.0%	8.6%
NM	1.6%	1.5%	0.0%	0.0%	1.5%	0.0%	0.0%	36.8%	35.3%	35.8%	38.2%	35.3%	40.6%
NV	1.7%	1.6%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%
NY	0.4%	0.0%	0.0%	0.3%	0.2%	0.2%	0.3%	1.0%	0.8%	0.7%	1.3%	0.8%	0.9%
OH	0.1%	0.1%	0.2%	0.4%	0.1%	0.9%	0.7%	1.8%	2.8%	3.9%	4.0%	3.9%	4.3%
OK	0.0%	0.0%	0.3%	0.3%	1.4%	0.3%	1.7%	0.7%	0.7%	1.0%	1.0%	1.4%	1.5%
OR	0.0%	0.0%	0.0%	0.8%	0.0%	1.6%	0.0%	0.8%	1.6%	1.7%	0.8%	0.0%	0.9%
PA	0.9%	0.6%	0.9%	0.8%	0.9%	0.6%	1.1%	5.8%	8.9%	8.9%	8.7%	8.6%	8.3%
PR	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
RI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.3%	10.1%	10.3%	10.1%	11.4%	10.3%
SC	3.3%	1.6%	0.5%	1.1%	0.5%	0.5%	0.6%	1.1%	1.1%	2.2%	1.7%	1.6%	0.6%
SD	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	1.0%	2.9%	3.8%	2.9%	4.1%
TN	1.0%	1.0%	0.3%	0.6%	0.6%	1.0%	0.6%	1.3%	3.2%	3.2%	3.2%	3.6%	3.6%
TX	5.3%	5.1%	0.5%	0.4%	0.4%	0.4%	0.4%	0.3%	0.8%	0.6%	0.5%	0.7%	0.5%
UT	0.0%	0.0%	1.0%	1.1%	0.0%	1.0%	0.0%	1.1%	1.1%	1.1%	2.1%	1.1%	1.1%
VA	0.7%	0.7%	0.4%	0.0%	0.4%	1.1%	1.4%	6.0%	6.0%	5.0%	4.6%	5.8%	5.7%
VT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.6%	28.6%	25.7%	25.7%	25.7%	30.3%
WA	0.0%	0.0%	0.5%	0.5%	0.0%	0.0%	0.0%	2.0%	2.0%	3.1%	2.5%	2.5%	2.6%
WI	2.0%	1.4%	0.3%	0.3%	0.3%	1.4%	1.1%	1.4%	3.7%	4.3%	4.8%	4.3%	5.4%
WV	3.3%	3.3%	0.0%	0.8%	0.8%	0.0%	1.6%	28.7%	31.1%	30.3%	30.6%	30.0%	31.4%
WY	5.9%	5.7%	0.0%	0.0%	3.0%	0.0%	0.0%	5.9%	0.0%	0.0%	0.0%	3.0%	0.0%
<b>National</b>	<b>1.9%</b>	<b>1.9%</b>	<b>0.7%</b>	<b>0.8%</b>	<b>0.5%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>3.4%</b>	<b>4.2%</b>	<b>4.6%</b>	<b>4.8%</b>	<b>4.6%</b>	<b>4.4%</b>



## NO GOWNS BY STATE

Provider State	May 31, 2020	June 7, 2020	June 14, 2020	June 21, 2020	June 28, 2020	July 5, 2020	July 12, 2020	July 19, 2020	July 26, 2020	August 2, 2020	August 9, 2020	August 16, 2020	August 23, 2020
AK	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AL	1.3%	2.3%	0.0%	0.4%	0.9%	0.9%	2.1%	6.9%	8.3%	7.6%	7.3%	8.2%	7.9%
AR	1.9%	1.4%	0.5%	0.5%	0.5%	1.4%	0.0%	0.0%	0.0%	0.5%	0.5%	0.0%	0.0%
AZ	0.0%	0.0%	0.0%	0.7%	0.7%	0.0%	0.0%	3.6%	5.0%	4.4%	3.6%	3.5%	3.6%
CA	1.2%	0.8%	0.2%	0.3%	0.1%	0.2%	0.3%	0.4%	0.3%	0.4%	0.5%	0.4%	0.3%
CO	13.1%	12.3%	1.4%	1.4%	0.5%	0.9%	0.9%	6.8%	6.8%	7.3%	6.3%	6.3%	5.7%
CT	1.5%	2.5%	1.4%	1.0%	1.4%	1.4%	1.0%	9.5%	9.6%	9.1%	9.5%	9.1%	9.1%
DC	0.0%	0.0%	0.0%	0.0%	0.0%	5.9%	0.0%	0.0%	0.0%	0.0%	5.3%	0.0%	0.0%
DE	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	15.2%	15.6%	13.0%	15.2%	13.0%	13.6%
FL	2.0%	1.2%	0.6%	0.4%	0.9%	0.6%	0.5%	2.1%	3.8%	3.2%	3.3%	3.3%	3.1%
GA	5.2%	5.4%	0.3%	0.3%	0.3%	0.3%	0.3%	0.9%	1.5%	0.9%	1.5%	1.2%	0.9%
GU	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
HI	2.3%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	2.3%	4.7%	4.9%	7.1%
IA	9.1%	9.4%	8.2%	8.9%	9.1%	8.9%	9.1%	11.1%	10.9%	10.8%	12.5%	13.5%	6.4%
ID	0.0%	0.0%	1.3%	0.0%	0.0%	1.2%	0.0%	1.2%	2.4%	1.2%	3.7%	3.7%	5.1%
IL	1.3%	1.2%	0.7%	0.6%	0.7%	0.4%	0.6%	1.6%	2.2%	2.2%	1.6%	1.7%	2.0%
IN	0.4%	1.2%	0.2%	0.8%	0.0%	0.2%	0.4%	1.0%	1.3%	1.2%	2.1%	1.2%	1.2%
KS	1.5%	1.5%	1.5%	2.2%	1.5%	0.9%	0.6%	1.6%	1.6%	1.9%	4.7%	2.5%	2.6%
KY	0.8%	0.7%	0.4%	1.1%	0.0%	0.0%	1.1%	6.8%	6.5%	6.9%	6.8%	7.1%	6.6%
LA	0.4%	0.4%	0.4%	0.0%	0.4%	0.0%	1.9%	0.4%	1.6%	1.2%	2.0%	1.6%	1.2%
MA	1.7%	1.4%	1.6%	1.6%	1.6%	2.4%	1.6%	9.8%	13.2%	13.3%	13.4%	12.0%	8.7%
MD	8.5%	8.2%	0.9%	0.9%	0.9%	1.4%	0.9%	8.7%	8.6%	8.7%	8.7%	11.3%	11.9%
ME	2.2%	0.0%	1.1%	0.0%	0.0%	1.1%	1.1%	13.0%	16.5%	17.4%	17.4%	18.5%	17.6%
MI	3.0%	1.7%	0.2%	0.2%	0.2%	0.2%	0.0%	0.5%	1.0%	2.9%	3.2%	2.9%	2.4%
MN	1.8%	1.4%	1.4%	1.1%	0.8%	1.1%	1.4%	1.4%	2.8%	2.0%	5.3%	4.7%	4.9%
MO	2.6%	2.4%	1.2%	1.2%	0.6%	0.6%	0.8%	1.0%	1.8%	1.8%	1.6%	1.6%	1.2%
MS	1.1%	1.1%	0.5%	0.0%	0.5%	1.0%	0.5%	0.0%	0.0%	1.0%	0.5%	0.0%	1.1%
MT	3.0%	4.4%	4.3%	2.9%	4.4%	4.3%	2.9%	2.9%	4.3%	1.4%	0.0%	0.0%	0.0%
NC	8.6%	8.0%	1.9%	1.2%	1.4%	1.9%	1.7%	3.4%	3.9%	11.3%	11.6%	13.2%	3.2%
ND	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	3.8%	12.5%	11.4%	11.8%
NE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	1.0%	3.6%	3.1%	2.7%
NH	1.4%	1.4%	0.0%	0.0%	0.0%	2.7%	0.0%	37.8%	40.5%	39.2%	40.5%	37.8%	36.5%
NJ	2.8%	1.5%	0.9%	1.2%	0.6%	0.6%	0.9%	9.3%	10.8%	11.0%	11.6%	11.6%	10.4%
NM	1.6%	1.5%	0.0%	0.0%	1.5%	1.5%	1.5%	35.3%	36.8%	37.3%	41.2%	38.2%	42.2%
NV	3.3%	3.1%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%
NY	2.8%	2.8%	2.4%	2.5%	2.7%	2.5%	2.5%	2.6%	2.8%	2.8%	1.2%	0.5%	0.9%
OH	0.6%	0.3%	0.3%	0.3%	0.1%	0.9%	0.9%	1.9%	4.5%	5.3%	5.5%	5.6%	5.4%
OK	0.0%	0.0%	0.0%	0.3%	1.4%	0.3%	1.4%	0.7%	0.7%	1.0%	1.4%	2.7%	2.2%
OR	0.8%	0.0%	0.0%	1.6%	0.0%	1.6%	0.0%	2.4%	0.8%	2.5%	1.6%	1.6%	1.7%
PA	2.5%	1.9%	1.4%	1.1%	1.4%	1.7%	1.8%	6.2%	8.6%	9.2%	8.6%	8.3%	8.3%
PR	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
RI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.3%	12.7%	10.3%	12.7%	11.4%	10.3%
SC	2.2%	1.1%	0.0%	1.1%	0.5%	0.0%	0.0%	0.5%	0.6%	1.6%	2.2%	1.6%	1.1%
SD	1.0%	1.9%	1.0%	1.0%	1.0%	1.0%	1.9%	2.9%	2.9%	1.9%	3.8%	2.9%	5.1%
TN	2.3%	1.9%	0.6%	1.0%	1.0%	1.6%	1.3%	1.9%	3.5%	3.6%	3.6%	3.9%	3.6%
TX	5.7%	5.4%	0.5%	0.5%	0.7%	0.5%	0.5%	0.4%	3.8%	3.7%	3.7%	3.7%	3.9%
UT	0.0%	0.0%	1.0%	0.0%	0.0%	1.0%	0.0%	1.1%	1.1%	1.1%	2.1%	1.1%	2.2%
VA	0.7%	1.5%	0.7%	0.0%	0.4%	0.7%	1.8%	6.4%	6.0%	4.6%	5.0%	5.1%	4.9%
VT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.6%	31.4%	25.7%	25.7%	25.7%	27.3%
WA	0.5%	0.0%	1.5%	1.0%	0.0%	0.0%	0.5%	3.5%	3.0%	3.1%	3.5%	3.5%	3.2%
WI	2.9%	2.0%	0.9%	0.6%	0.9%	1.7%	1.1%	1.7%	4.3%	5.7%	6.0%	4.6%	5.1%
WV	3.3%	3.3%	0.8%	0.8%	0.8%	0.0%	1.6%	30.3%	30.3%	29.5%	29.8%	30.0%	30.5%
WY	5.9%	8.6%	2.9%	2.9%	3.0%	0.0%	0.0%	8.8%	3.0%	0.0%	0.0%	0.0%	0.0%
<b>National</b>	<b>2.6%</b>	<b>2.4%</b>	<b>1.0%</b>	<b>1.0%</b>	<b>1.0%</b>	<b>1.1%</b>	<b>1.1%</b>	<b>3.6%</b>	<b>4.7%</b>	<b>5.0%</b>	<b>5.3%</b>	<b>5.1%</b>	<b>4.6%</b>

## NO EYE PROTECTION BY STATE

Provider State	May 31, 2020	June 7, 2020	June 14, 2020	June 21, 2020	June 28, 2020	July 5, 2020	July 12, 2020	July 19, 2020	July 26, 2020	August 2, 2020	August 9, 2020	August 16, 2020	August 23, 2020
AK	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AL	0.4%	2.3%	0.4%	0.9%	0.9%	0.9%	1.6%	6.5%	8.3%	7.6%	8.3%	9.1%	8.4%
AR	2.4%	0.9%	0.9%	0.9%	1.4%	1.4%	0.0%	0.0%	0.0%	0.5%	0.5%	0.0%	0.0%
AZ	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	5.7%	5.1%	5.1%	4.9%	5.1%
CA	0.9%	0.9%	0.3%	0.3%	0.1%	0.2%	0.2%	0.3%	0.3%	0.3%	0.4%	0.3%	0.2%
CO	12.2%	11.4%	0.9%	1.4%	0.5%	1.4%	1.4%	5.9%	6.3%	6.8%	6.3%	6.3%	7.1%
CT	2.0%	2.0%	1.0%	0.5%	1.0%	0.5%	0.5%	9.5%	9.1%	9.1%	9.5%	8.6%	9.1%
DC	0.0%	0.0%	0.0%	0.0%	0.0%	5.9%	0.0%	0.0%	10.5%	5.3%	10.5%	5.3%	5.9%
DE	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	15.2%	15.6%	15.2%	15.2%	13.0%	13.6%
FL	0.6%	0.9%	0.6%	0.7%	0.7%	0.6%	0.8%	2.3%	3.8%	3.1%	3.3%	3.3%	3.1%
GA	4.9%	5.1%	0.3%	0.3%	0.3%	0.0%	0.0%	1.2%	1.2%	1.5%	1.2%	0.9%	0.6%
GU	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
HI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.6%	11.6%	14.0%	14.6%	14.3%
IA	1.4%	1.2%	0.9%	1.4%	1.9%	1.9%	2.1%	3.1%	3.3%	3.5%	5.4%	6.2%	6.9%
ID	2.6%	0.0%	2.5%	0.0%	1.2%	2.4%	1.2%	4.9%	6.1%	6.2%	7.4%	6.2%	7.6%
IL	0.7%	1.2%	0.4%	0.4%	0.4%	0.3%	0.6%	0.9%	2.0%	1.6%	1.3%	1.5%	1.5%
IN	0.2%	0.6%	0.2%	0.6%	0.0%	0.0%	0.2%	0.8%	1.0%	1.2%	1.5%	1.0%	1.2%
KS	3.1%	2.2%	1.9%	2.2%	1.9%	1.5%	0.9%	1.9%	1.6%	1.6%	3.1%	2.2%	2.3%
KY	1.1%	1.8%	0.7%	1.4%	0.7%	0.4%	1.4%	6.1%	6.5%	6.9%	6.8%	7.5%	7.0%
LA	0.4%	0.0%	0.8%	0.0%	0.4%	0.0%	2.3%	0.8%	0.4%	0.8%	1.2%	1.2%	0.8%
MA	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.5%	8.4%	11.4%	12.0%	12.6%	11.2%	8.1%
MD	6.5%	6.7%	0.0%	0.0%	0.0%	0.5%	0.0%	8.2%	8.6%	8.2%	8.3%	11.3%	11.9%
ME	1.1%	0.0%	1.1%	1.1%	0.0%	0.0%	0.0%	13.0%	16.5%	17.4%	17.4%	16.3%	16.5%
MI	2.0%	1.7%	0.2%	0.5%	0.5%	0.2%	0.2%	0.5%	0.7%	2.7%	3.4%	2.7%	2.2%
MN	0.6%	0.3%	0.6%	0.6%	0.8%	0.8%	0.8%	1.1%	2.2%	2.5%	5.5%	5.6%	5.5%
MO	1.0%	1.4%	0.2%	0.4%	0.2%	0.4%	0.4%	0.8%	1.0%	0.6%	1.0%	1.0%	0.6%
MS	1.1%	1.6%	0.5%	0.0%	0.5%	1.0%	0.5%	0.0%	0.0%	1.6%	0.5%	0.0%	2.2%
MT	3.0%	2.9%	2.9%	2.9%	4.4%	4.3%	2.9%	2.9%	4.3%	1.4%	0.0%	0.0%	0.0%
NC	7.7%	7.1%	0.7%	0.2%	1.4%	1.0%	1.2%	2.9%	3.1%	10.8%	10.6%	11.7%	3.0%
ND	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	2.5%	11.3%	10.1%	10.5%
NE	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	1.0%	3.6%	3.1%	2.2%
NH	1.4%	1.4%	0.0%	0.0%	0.0%	2.7%	0.0%	37.8%	40.5%	40.5%	40.5%	40.5%	37.8%
NJ	0.3%	0.3%	0.6%	0.6%	0.3%	0.6%	0.6%	8.7%	9.0%	8.7%	9.6%	9.3%	8.6%
NM	1.6%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	35.3%	36.8%	37.3%	41.2%	38.2%	42.2%
NV	1.7%	1.6%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%
NY	0.5%	0.2%	0.0%	0.5%	0.5%	0.5%	0.8%	0.8%	1.2%	0.7%	1.5%	1.3%	1.4%
OH	0.4%	0.2%	0.2%	0.3%	0.1%	0.7%	0.9%	1.7%	2.8%	3.6%	3.6%	3.8%	3.7%
OK	0.0%	0.0%	0.0%	0.3%	1.4%	0.3%	1.4%	0.7%	0.7%	1.0%	1.4%	2.1%	1.5%
OR	0.8%	0.0%	0.0%	0.8%	0.0%	1.6%	0.0%	1.6%	0.8%	1.7%	1.6%	1.6%	2.6%
PA	1.2%	0.9%	0.9%	0.8%	0.8%	0.5%	0.9%	5.7%	8.6%	8.9%	8.6%	8.1%	8.1%
PR	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
RI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.3%	10.1%	10.3%	10.1%	11.4%	10.3%
SC	2.8%	1.1%	0.0%	0.5%	0.5%	0.5%	0.0%	0.5%	0.6%	1.6%	1.1%	1.1%	0.6%
SD	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	1.0%	1.0%	2.9%	1.9%	5.1%
TN	1.3%	1.0%	0.6%	0.3%	0.3%	1.3%	0.6%	1.9%	2.6%	2.6%	2.6%	2.6%	2.0%
TX	5.6%	5.6%	0.9%	0.8%	0.9%	0.6%	0.3%	0.5%	9.7%	9.1%	9.5%	9.7%	10.2%
UT	0.0%	0.0%	1.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%
VA	0.4%	0.4%	0.7%	0.0%	0.4%	0.4%	1.8%	5.7%	2.1%	1.4%	1.4%	2.2%	1.9%
VT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.6%	28.6%	25.7%	25.7%	25.7%	27.3%
WA	0.0%	0.5%	1.0%	1.5%	0.0%	0.0%	0.5%	3.0%	1.5%	2.6%	2.5%	3.0%	3.2%
WI	1.7%	1.2%	0.0%	0.0%	0.3%	0.9%	0.3%	0.3%	2.6%	3.1%	3.7%	3.4%	3.6%
WV	3.3%	3.3%	0.8%	0.8%	0.8%	0.0%	0.8%	28.7%	28.7%	27.9%	28.1%	27.5%	28.8%
WY	5.9%	5.7%	0.0%	0.0%	3.0%	0.0%	0.0%	5.9%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>National</b>	<b>1.8%</b>	<b>1.7%</b>	<b>0.5%</b>	<b>0.6%</b>	<b>0.6%</b>	<b>0.6%</b>	<b>0.7%</b>	<b>3.1%</b>	<b>4.4%</b>	<b>4.7%</b>	<b>5.1%</b>	<b>5.0%</b>	<b>4.8%</b>

## NO GLOVES BY STATE

Provider State	May 31, 2020	June 7, 2020	June 14, 2020	June 21, 2020	June 28, 2020	July 5, 2020	July 12, 2020	July 19, 2020	July 26, 2020	August 2, 2020	August 9, 2020	August 16, 2020	August 23, 2020
AK	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AL	0.0%	0.9%	0.0%	0.9%	0.5%	0.4%	1.0%	1.9%	2.8%	1.3%	1.4%	1.4%	0.5%
AR	0.5%	0.0%	0.0%	0.5%	0.5%	0.9%	0.0%	0.0%	0.0%	0.5%	0.5%	0.0%	0.0%
AZ	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.7%	0.0%
CA	0.7%	0.8%	0.3%	0.2%	0.1%	0.2%	0.2%	0.2%	0.2%	0.3%	0.3%	0.3%	0.2%
CO	11.7%	11.0%	0.5%	0.5%	0.0%	0.0%	0.5%	2.3%	1.8%	0.9%	0.9%	0.9%	0.9%
CT	2.0%	2.0%	1.0%	0.5%	1.0%	1.0%	1.0%	1.0%	0.5%	1.0%	1.0%	0.0%	0.5%
DC	0.0%	0.0%	0.0%	0.0%	5.3%	5.9%	0.0%	0.0%	0.0%	0.0%	10.5%	0.0%	0.0%
DE	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	2.2%	0.0%	4.4%	0.0%	0.0%	0.0%	0.0%
FL	0.2%	0.5%	0.4%	0.3%	0.4%	0.3%	0.2%	0.2%	1.8%	1.1%	1.1%	1.3%	1.5%
GA	4.3%	4.5%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.6%	0.0%	0.0%	0.0%	0.0%
GU	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
HI	0.0%	0.0%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	2.4%	2.4%
IA	1.4%	1.2%	0.9%	1.2%	1.9%	2.1%	1.9%	2.4%	1.9%	1.6%	3.3%	4.0%	4.5%
ID	0.0%	0.0%	1.3%	0.0%	0.0%	1.2%	0.0%	0.0%	1.2%	0.0%	2.5%	3.7%	3.8%
IL	0.7%	1.3%	0.6%	0.4%	0.6%	0.1%	0.4%	0.6%	1.4%	1.2%	0.6%	0.9%	0.6%
IN	0.2%	0.6%	0.2%	0.6%	0.2%	0.0%	0.0%	0.4%	0.6%	0.4%	1.0%	0.6%	0.6%
KS	1.2%	0.9%	0.9%	1.2%	0.9%	0.6%	0.6%	1.2%	1.6%	1.6%	3.4%	2.2%	2.3%
KY	0.0%	0.4%	0.4%	1.4%	0.0%	1.4%	2.1%	2.1%	1.8%	1.8%	1.8%	2.5%	1.8%
LA	0.4%	0.0%	0.4%	0.0%	0.0%	0.0%	1.6%	0.4%	0.0%	1.6%	0.4%	0.8%	0.4%
MA	0.3%	0.3%	0.5%	0.3%	0.3%	1.1%	0.8%	0.8%	0.5%	1.1%	1.4%	0.8%	1.1%
MD	6.0%	6.7%	0.0%	0.0%	0.0%	0.5%	0.0%	1.4%	1.4%	2.3%	2.3%	0.9%	1.4%
ME	1.1%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	2.2%	3.3%	2.2%	0.0%	1.1%	1.1%
MI	1.8%	1.7%	0.5%	0.7%	0.7%	0.5%	0.2%	0.2%	1.2%	0.5%	0.7%	0.5%	0.5%
MN	0.6%	0.3%	0.6%	1.1%	1.1%	0.8%	1.1%	0.8%	1.1%	0.8%	4.4%	3.9%	4.6%
MO	0.4%	1.0%	0.0%	0.2%	0.0%	0.4%	0.6%	0.6%	0.6%	0.2%	0.8%	0.4%	0.2%
MS	1.1%	1.1%	0.5%	0.0%	0.5%	1.6%	0.5%	0.0%	0.0%	1.0%	0.5%	0.0%	1.1%
MT	0.0%	0.0%	0.0%	0.0%	1.5%	1.4%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%
NC	7.4%	7.1%	0.7%	0.2%	1.2%	1.0%	1.0%	0.7%	1.5%	1.4%	1.2%	2.0%	1.0%
ND	1.3%	1.3%	2.5%	1.3%	2.5%	1.3%	1.3%	2.5%	2.5%	3.8%	12.5%	10.1%	9.2%
NE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	1.0%	3.6%	2.6%	2.7%
NH	1.4%	1.4%	0.0%	0.0%	0.0%	2.7%	0.0%	1.4%	0.0%	0.0%	0.0%	1.4%	2.7%
NJ	0.0%	0.6%	0.0%	0.9%	0.3%	0.0%	0.3%	0.0%	0.3%	0.3%	0.9%	0.3%	0.0%
NM	1.6%	1.5%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	3.0%	5.9%	1.5%	6.3%
NV	1.7%	1.6%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	1.6%
NY	0.4%	0.2%	0.0%	0.2%	0.2%	0.5%	0.5%	0.5%	0.3%	0.0%	0.8%	0.2%	0.4%
OH	0.1%	0.1%	0.2%	0.2%	0.0%	1.0%	1.0%	1.1%	1.4%	1.7%	1.3%	1.5%	1.1%
OK	0.0%	0.3%	0.0%	0.3%	1.4%	0.7%	1.4%	0.7%	0.7%	1.0%	1.0%	1.7%	1.5%
OR	0.0%	0.0%	0.0%	0.8%	0.0%	2.4%	1.6%	0.8%	0.0%	1.7%	0.8%	1.6%	0.9%
PA	0.9%	0.5%	0.9%	0.6%	0.8%	0.6%	0.9%	0.8%	0.9%	1.1%	1.2%	0.6%	0.6%
PR	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
RI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%
SC	2.2%	1.1%	0.5%	1.1%	0.5%	0.0%	0.0%	0.5%	0.0%	0.5%	1.1%	0.5%	0.6%
SD	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	1.9%	0.0%	0.0%	1.9%	1.0%	3.1%
TN	1.6%	1.0%	0.3%	0.3%	0.3%	1.0%	0.6%	0.6%	1.3%	1.0%	1.3%	1.6%	2.0%
TX	5.1%	5.0%	0.4%	0.6%	0.4%	0.6%	0.3%	0.3%	0.6%	0.5%	0.6%	0.6%	0.7%
UT	0.0%	0.0%	1.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%
VA	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	1.1%	1.1%	0.0%	0.0%	0.4%	0.0%
VT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	2.9%	0.0%	0.0%	0.0%	0.0%
WA	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	1.0%	0.5%	1.0%	0.5%	0.5%	1.6%
WI	1.7%	1.2%	0.0%	0.3%	0.3%	0.9%	0.3%	0.0%	0.3%	0.3%	1.1%	0.0%	0.0%
WV	3.3%	3.3%	0.0%	0.8%	0.8%	0.0%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
WY	5.9%	5.7%	0.0%	0.0%	3.0%	0.0%	0.0%	5.9%	0.0%	2.9%	3.0%	0.0%	0.0%
<b>National</b>	<b>1.5%</b>	<b>1.5%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.5%</b>	<b>0.6%</b>	<b>0.6%</b>	<b>0.7%</b>	<b>0.9%</b>	<b>0.8%</b>	<b>1.2%</b>	<b>1.1%</b>	<b>1.1%</b>

## NO HAND SANITIZER BY STATE

Provider State	May 31, 2020	June 7, 2020	June 14, 2020	June 21, 2020	June 28, 2020	July 5, 2020	July 12, 2020	July 19, 2020	July 26, 2020	August 2, 2020	August 9, 2020	August 16, 2020	August 23, 2020
AK	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AL	0.4%	1.8%	0.0%	0.4%	0.9%	0.4%	1.0%	1.4%	2.3%	1.8%	1.4%	1.4%	0.9%
AR	0.9%	0.0%	0.0%	0.5%	0.5%	0.9%	0.0%	0.0%	0.0%	0.5%	0.5%	0.0%	0.0%
AZ	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	1.5%	0.7%	0.7%	0.0%
CA	1.1%	1.0%	0.4%	0.4%	0.1%	0.2%	0.2%	0.2%	0.4%	0.3%	0.4%	0.3%	0.1%
CO	11.7%	11.0%	0.9%	0.5%	0.0%	0.0%	0.5%	0.9%	1.4%	1.4%	2.3%	0.9%	1.4%
CT	1.5%	2.0%	1.0%	0.5%	1.0%	0.5%	0.5%	1.0%	0.5%	0.5%	1.0%	0.0%	0.5%
DC	0.0%	0.0%	0.0%	0.0%	0.0%	5.9%	0.0%	0.0%	0.0%	0.0%	5.3%	0.0%	0.0%
DE	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%
FL	0.3%	0.8%	0.9%	0.4%	0.4%	0.6%	0.0%	0.6%	1.5%	0.9%	1.1%	0.9%	0.6%
GA	4.6%	4.8%	0.3%	0.6%	0.6%	0.0%	0.0%	0.6%	0.3%	0.3%	0.0%	0.0%	0.3%
GU	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
HI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	2.4%	2.4%
IA	1.7%	1.2%	0.9%	1.2%	1.9%	1.6%	1.4%	2.1%	1.9%	1.6%	3.3%	2.6%	3.2%
ID	1.3%	0.0%	1.3%	0.0%	1.2%	1.2%	0.0%	0.0%	1.2%	0.0%	2.5%	3.7%	3.8%
IL	0.7%	1.3%	0.4%	0.6%	0.4%	0.6%	0.6%	0.4%	1.2%	1.0%	0.6%	0.6%	0.6%
IN	0.4%	0.6%	0.2%	0.8%	0.0%	0.6%	0.2%	0.4%	0.8%	0.6%	1.2%	0.6%	0.6%
KS	0.9%	0.9%	0.9%	1.5%	1.5%	0.9%	0.9%	1.6%	0.9%	1.9%	3.1%	2.2%	2.0%
KY	0.0%	0.4%	0.4%	1.1%	0.4%	0.0%	1.4%	0.4%	0.4%	0.4%	0.7%	1.4%	0.7%
LA	0.4%	0.0%	0.4%	0.0%	0.0%	0.0%	1.6%	0.4%	0.0%	1.2%	1.2%	1.2%	0.4%
MA	0.3%	0.5%	0.3%	0.3%	0.5%	0.8%	0.8%	0.5%	0.5%	0.8%	1.1%	0.8%	0.8%
MD	11.1%	11.5%	5.1%	5.1%	4.6%	5.9%	4.1%	5.0%	4.1%	5.9%	6.0%	4.5%	3.7%
ME	1.1%	1.1%	2.2%	0.0%	0.0%	1.1%	1.1%	3.3%	3.3%	1.1%	1.1%	2.2%	2.2%
MI	2.0%	2.0%	0.2%	0.5%	0.5%	0.2%	0.2%	0.2%	0.7%	0.5%	1.0%	0.5%	0.2%
MN	1.2%	0.6%	1.7%	0.8%	1.1%	1.1%	1.4%	0.8%	1.7%	1.1%	4.2%	3.6%	3.8%
MO	0.6%	1.2%	0.2%	0.2%	0.2%	0.6%	0.6%	0.6%	0.6%	0.2%	0.8%	0.4%	0.4%
MS	1.1%	1.1%	0.5%	0.0%	0.5%	1.0%	1.0%	0.0%	0.0%	1.6%	0.5%	0.5%	1.1%
MT	0.0%	0.0%	0.0%	0.0%	1.5%	1.4%	1.4%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%
NC	7.4%	7.3%	0.7%	0.7%	1.2%	1.2%	0.7%	0.7%	1.5%	1.4%	1.0%	2.0%	1.2%
ND	1.3%	1.3%	2.5%	1.3%	2.5%	2.5%	1.3%	1.3%	1.3%	2.5%	11.3%	10.1%	10.5%
NE	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	1.0%	4.2%	2.6%	2.2%
NH	1.4%	2.7%	0.0%	0.0%	0.0%	2.7%	0.0%	1.4%	0.0%	1.4%	1.4%	1.4%	2.7%
NJ	0.9%	0.0%	0.0%	0.0%	0.0%	0.3%	0.6%	0.6%	0.3%	0.3%	0.9%	0.0%	0.0%
NM	1.6%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	3.0%	5.9%	2.9%	4.7%
NV	1.7%	1.6%	0.0%	1.6%	1.7%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	1.6%
NY	0.4%	0.0%	0.3%	0.2%	0.2%	0.3%	0.5%	0.3%	0.7%	0.3%	1.0%	0.3%	0.7%
OH	0.1%	0.4%	0.1%	0.2%	0.0%	0.2%	0.2%	0.3%	0.6%	0.6%	0.5%	0.9%	0.9%
OK	0.0%	0.3%	0.3%	0.3%	1.7%	1.0%	1.4%	0.7%	1.4%	1.4%	1.0%	1.4%	1.1%
OR	0.0%	0.0%	0.0%	0.8%	0.0%	1.6%	0.0%	0.8%	0.8%	1.7%	0.8%	1.6%	0.9%
PA	0.9%	0.6%	1.1%	0.8%	0.9%	0.9%	0.9%	1.1%	1.1%	1.1%	0.9%	0.9%	0.8%
PR	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
RI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%
SC	2.2%	1.1%	0.5%	0.5%	1.1%	0.0%	0.0%	0.0%	0.0%	0.5%	0.6%	0.5%	0.0%
SD	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	1.0%	1.0%	0.0%	0.0%	1.9%	1.0%	5.1%
TN	1.0%	1.0%	0.3%	0.3%	0.3%	1.0%	0.3%	0.6%	1.6%	1.3%	1.0%	1.6%	1.7%
TX	5.1%	4.9%	0.4%	0.6%	0.5%	0.4%	0.7%	0.5%	0.8%	0.8%	0.8%	0.9%	0.8%
UT	0.0%	0.0%	1.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%
VA	0.7%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	1.1%	1.1%	0.4%	0.4%	0.4%	0.0%
VT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	2.9%	0.0%	0.0%	0.0%	0.0%
WA	1.5%	0.5%	1.0%	0.0%	0.0%	0.0%	0.0%	1.5%	1.0%	0.5%	1.0%	0.5%	1.6%
WI	2.0%	1.4%	0.0%	0.0%	0.3%	0.9%	0.6%	0.3%	0.3%	0.6%	1.4%	0.3%	0.3%
WV	3.3%	3.3%	0.0%	0.8%	0.8%	0.0%	1.6%	1.6%	2.5%	2.5%	2.5%	1.7%	1.7%
WY	5.9%	5.7%	0.0%	0.0%	3.0%	0.0%	0.0%	5.9%	3.0%	0.0%	0.0%	0.0%	0.0%
<b>National</b>	<b>1.7%</b>	<b>1.7%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.6%</b>	<b>0.6%</b>	<b>0.6%</b>	<b>0.7%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>1.3%</b>	<b>1.0%</b>	<b>1.0%</b>

# Notes

- 1 Kaiser Family Foundation, April 2020: COVID-19 Issues and Medicaid Policy Options for People Who Need Long-Term Services and Supports. <https://www.kff.org/medicaid/issue-brief/covid-19-issues-and-medicaid-policy-options-for-people-who-need-long-term-services-and-supports/>
- 2 CMS: Independent Nursing Home COVID-19 Commission Findings Validate Unprecedented Federal Response. <https://www.cms.gov/newsroom/press-releases/independent-nursing-home-covid-19-commission-findings-validate-unprecedented-federal-response>
- 3 Based on Frontier Group analysis of CMS Nursing Home COVID-19 data.
- 4 Ibid.
- 5 Ibid.
- 6 The Nursing Home COVID-19 Public File. <https://data.cms.gov/stories/s/bkwz-xpvg>
- 7 Based on Frontier Group analysis of CMS Nursing Home COVID-19 data.
- 8 Ibid.
- 9 Ibid.
- 10 Interview, Oct 12, 2020
- 11 Proclamation of National Emergency. <https://www.whitehouse.gov/presidential-actions/proclamation-declaring-national-emergency-concerning-novel-coronavirus-disease-covid-19-outbreak/>
- 12 As of Oct. 9, there have been 58,481 COVID deaths in nursing homes and 245,912 confirmed cases. (This doesn't count 141,744 suspected cases in nursing homes.) In the U.S., there have been 217,817 deaths and 7.8 million cases.
- 13 CDC, <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-in-nursing-homes.html>
- 14 FDA, Questions about PPE. <https://www.fda.gov/medical-devices/personal-protective-equipment-infection-control/questions-about-personal-protective-equipment-ppe>
- 15 Interview, Oct. 1, 2020.
- 16 Based on Frontier Group analysis of CMS Nursing Home COVID-19 data.
- 17 Ibid.
- 18 Ibid.
- 19 Ibid.
- 20 Ibid.
- 21 Ibid.
- 22 Ibid.
- 23 Ibid.
- 24 Ibid.
- 25 Ibid.
- 26 Ibid.
- 27 Ibid.
- 28 Ibid.
- 29 Ibid.
- 30 Center for Health Economics and Policy Studies, San Diego State University, Sept. 5, 2020. [https://cheps.sdsu.edu/docs/Contagion\\_Externality\\_Sturgis\\_Motorcycle\\_Rally\\_9-5-20\\_Dave\\_et\\_al.pdf](https://cheps.sdsu.edu/docs/Contagion_Externality_Sturgis_Motorcycle_Rally_9-5-20_Dave_et_al.pdf)
- 31 WorldOMeter. <https://www.worldometers.info/coronavirus/usa/west-virginia/>
- 32 WorldOMeter. <https://www.worldometers.info/coronavirus/usa/new-hampshire/>

33 U.S. Department of Health & Human Services. <https://www.remm.nlm.gov/sns.htm#:~:text=The%20program%20was%20originally%20called,-jointly%20by%20DHS%20and%20HHS>.<https://www.remm.nlm.gov/sns.htm#:~:text=The%20program%20was%20originally%20called,jointly%20by%20DHS%20and%20HHS>.

34 Interview, Oct 1, 2020

35 Interview, Oct 1, 2020

36 Interview, Oct 1, 2020

37 American Nurses Association. <https://www.nursingworld.org/~4a558d/globalassets/covid19/ana-ppe-survey-one-pager---final.pdf>

38 FDA, <https://www.fda.gov/medical-devices/personal-protective-equipment-infection-control/questions-about-personal-protective-equipment-ppe>

39 Interview, Oct. 1, 2020

40 FDA, <https://www.fda.gov/medical-devices/personal-protective-equipment-infection-control/n95-respirators-surgical-masks-and-face-masks>

41 8210 model is common. <https://multimedia.3m.com/mws/media/1862179O/get-the-facts-n95-respirator-pricing.pdf>

42 Coronavirus Commission on Safety and Quality in Nursing Homes, <https://edit.cms.gov/files/document/covid-final-nh-commission-report.pdf>

43 American Nurses Association, <https://www.nursingworld.org/practice-policy/work-environment/health-safety/disaster-preparedness/coronavirus/corona-virus-letter-ahaamaana-dpa/>

44 U.S. Department of Health & Human Services. <https://www.hhs.gov/about/news/2020/04/08/hhs-announces-ventilator-contract-with-gm-under-defense-production-act.html>

45 <https://www.congress.gov/bill/116th-congress/house-bill/6711?s=1&r=7>

46 American Nurses Association, <https://www.nursingworld.org/~4a558d/globalassets/covid19/ana-ppe-survey-one-pager---final.pdf>

47 <https://www.youtube.com/watch?v=gYN-rwqWEnoo>

48 Patriots plane ferries critical masks from China to US, AP, April 2, 2020, <https://apnews.com/article/81fb059959f5d3de084c2df5dd16db6b>

49 In Desperation, New York State Pays Up to 15 Times the Normal Prices for Medical Equipment, April 2, 2020. <https://www.propublica.org/article/in-desperation-new-york-state-pays-up-to-15-times-the-normal-price-for-medical-equipment>

50 The American Health Care Association and National Center for Assisted Living (AHCA/NCAL): "Nursing Homes Warn Congress: Don't Leave Town Without Delivering Additional COVID Funding for Health And Long-Term Care Providers," <https://www.ahcancal.org/News-and-Communications/Press-Releases/Pages/Nursing-Homes-Warn-Congress-Don%E2%80%99t-Leave-Town-Without-Delivering-Additional-COVID-Funding-for-Health-And-Long-Term-Care-Prov.aspx>

51 Interview, Oct. 1, 2020

52 Center for Medicare and Medicaid Services, *CMS/CDC Nursing Home COVID-19 Data Quality Assurance Process*, downloaded from <https://data.cms.gov/download/bqa5-3dzf/application%2Fpdf> on 19 October 2020.

53 Center for Medicare and Medicaid Services, *COVID-19 Nursing Home Dataset*, accessed at: <https://data.cms.gov/Special-Programs-Initiatives-COVID-19-Nursing-Home/COVID-19-Nursing-Home-Dataset/s2uc-8wxp> on 9 September 2020.