All information in this index is derived from Get Us PPE’s database of requests for Personal Protective Equipment (PPE) unless otherwise stated.

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ABOUT GET US PPE SHORTAGE INDEX

Founded by emergency physicians in March 2020, Get Us PPE is the largest national nonprofit getting personal protective equipment (PPE) to healthcare and other essential workers, free of charge. Our mission is to equitably provide PPE to the people most in need. To request PPE donations, frontline workers register their PPE needs on our site. This information has allowed us to amass the most comprehensive nongovernmental database of PPE shortages in the United States. The Get Us PPE Shortage Index is a monthly collection of proprietary summary metrics derived from this database.

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We received 34% more requests for PPE in November than we did in October

66% of facilities were completely out of one or more types of PPE in November

Only 3% of November requests came from hospitals. The other 97% of requests came from non-hospital facilities

61% of requesters needed N95s, and 89% of them were reusing N95s at unsafe rates

In November, we received requests from frontline facilities in 44 states and Washington, D.C.

CO-FOUNDER SPOTLIGHT
ALI RAJA, MD, MBA, MPH, FACHE

Ali S. Raja is a co-founder of Get Us PPE and Executive Vice Chair of the Department of Emergency Medicine at Massachusetts General Hospital. Commenting on Get Us PPE’s November data, Dr. Raja noted “This winter, we’re going to find ourselves in the darkest days of the pandemic. Get Us PPE’s data show that the need for PPE is increasing sharply and, even with the vaccines being rolled out, we’ll need PPE for many more months.” He added, “However, there’s a light at the end of the tunnel — we just have to keep working towards it.”
total individual requests for PPE since late March, 2020. Get Us PPE has only been able to fulfill 12% of requests due to the limitations of our supply.

78 million

5.5 million

pieces of PPE requested to fill need for just ONE WEEK*

pieces of PPE delivered to frontline workers

CALCULATING PPE SHORTAGES: NITRILE GLOVES

* Nitrile gloves are emerging as the next major PPE shortage due to high burn rates and a disrupted supply chain. At Get Us PPE, twice as many gloves were requested in November as in October. To align with the standard used by the Federal Government and others, we are now counting gloves by the pair, rather than by the box, as we did in the past. This significantly increases our reported pieces of PPE requested and delivered, but it allows our data to be better used for context and comparison with other sources.

% REQUESTS FROM OTHER FACILITIES VS HOSPITALS

*Such as nursing homes, home health aide agencies, clinics, group homes, shelters, and COVID-testing facilities. Some facilities fall into more than one category, and are therefore counted once in each category.
TOP 3 MOST REQUESTED TYPES OF PPE NATIONALLY, NOVEMBER 2020

1. DISINFECTING WIPES
2. FILTERING FACEPIECE RESPIRATORS (N95 & Equivalent)
3. HAND SANITIZER

REQUESTERS REPORTING NO SUPPLY REMAINING OF AT LEAST ONE TYPE OF PPE

<table>
<thead>
<tr>
<th>Requesters</th>
<th>October</th>
<th>November</th>
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<tbody>
<tr>
<td>with no supply remaining</td>
<td>72%</td>
<td>66%</td>
</tr>
<tr>
<td>with &lt; 1 week remaining</td>
<td>15%</td>
<td>19%</td>
</tr>
<tr>
<td>with &gt;= 1 week remaining</td>
<td>13%</td>
<td>15%</td>
</tr>
</tbody>
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TOP 3 TYPES OF PPE REQUESTED IN 3 KEY STATES

**CALIFORNIA**
- DISINFECTING WIPES
- NITRILE GLOVES
- HAND SANITIZER

**ILLINOIS**
- DISINFECTING WIPES
- HAND SANITIZER
- NITRILE GLOVES

**PENNSYLVANIA**
- N95 RESPIRATORS
- FACE SHIELDS
- DISINFECTING WIPES
TOTAL REQUESTS FOR PPE BY STATE
as of November, 2020

Since March, Get Us PPE has received requests from all 50 states and some US territories.

In November, we received requests from

44 states +
Washington, D.C.
THE N95 SHORTAGE

In the United States, there are still not enough N95 respirators to keep healthcare workers safe. We spoke with a small sample of healthcare providers facing N95 shortages. Below is a case study of one emergency physician.

HOW MANY N95s ARE NEEDED TO KEEP ONE EMERGENCY PHYSICIAN SAFE FOR ONE WEEK?

During COVID-19, an emergency physician needs one N95 per patient per day. The doctor in our case study should be using about 70 N95s per week.

61% of facilities needed N95s in November

41% of the facilities that requested N95s had no supply remaining

HOW MANY N95s DOES AN EMERGENCY PHYSICIAN ACTUALLY HAVE PER WEEK?

The emergency physician in our case study has just one N95 per week, and she told us that other emergency healthcare workers she knows get one N95 per month. The CDC urges healthcare workers to use surgical masks with face shields when N95s are not available.
WHY CAN’T HEALTHCARE WORKERS REUSE N95s?

1x 2x 3x 4x 5x

- In medical settings, filtering facepiece respirators (N95s) are “fit tested” to ensure they fully seal to the face to keep infectious particles out.
- A significant percentage of N95s fail fit tests after four or five “donnings” and “doffings”\(^1,2\).
- However, this evidence is based on studies in which participants wore N95s for just five and forty minutes.
- When N95s are decontaminated between uses, the filtration performance drops sharply after the second decontamination\(^3\).
- Many healthcare workers today are reusing N95s more than five times, and wearing them for up to 12-hour shifts.
- As of late September, more than 1,700 healthcare workers in the U.S. had died of COVID-19\(^4\).

89% OF HEALTHCARE WORKERS WERE REUSING N95s AT UNSAFE RATES IN NOVEMBER

WHY DO HEALTHCARE WORKERS STILL NEED N95s AFTER THE VACCINE?

- Vaccine rollout takes time and we are in the most difficult period of the pandemic now.
- We do not know yet if vaccinated people can still spread COVID-19.
- Even after being vaccinated, healthcare workers will continue wearing PPE to protect against disease transmission.

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1 Impact of multiple consecutive donnings on filtering facepiece respirator fit, Bergman et. al; 2 The Effect on Fit of Multiple Consecutive Donning and Doffing of N95 Filtering Facepiece Respirators, Vuma et. al; 3 Assessment of N95 respirator decontamination and re-use for SARS-CoV-2, Fischer et. al; 4 Sins of Omission: How Government Failures to Track Covid-19 Data Have Led to More Than 1,700 Health Care Worker Deaths and Jeopardize Public Health, National Nurses United
**PPE SHORTAGES IN SCHOOLS**
**NOVEMBER - DECEMBER 2020**

**TOP 3 TYPES OF PPE MOST REQUESTED BY SCHOOLS**
Many requests came from school nurses, with some from teachers and administrators

- Filtering Facepiece Respirators (N95 & Equivalent)
- Hand Sanitizer
- Cloth Masks

**STATES WITH THE MOST PPE REQUESTS FROM SCHOOLS**

- TX
- OH
- NY
- PA
- NJ

**SCHOOLS REQUESTING PPE**

<table>
<thead>
<tr>
<th>PUBLIC</th>
<th>PRIVATE</th>
<th>TITLE I</th>
<th>NON-TITLE I</th>
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</thead>
<tbody>
<tr>
<td>82%</td>
<td>18%</td>
<td>74%</td>
<td>26%</td>
</tr>
</tbody>
</table>

"Our school PPE supply is so sparse, I started stapling my mask together to keep it longer. I feel safer at Trader Joe’s than I do at school. They take more precautions."

— School Nurse (anonymous)
ABOUT THE DATA

Get Us PPE is driven by hundreds of dedicated volunteers, and though we maintain a commitment to equity as a central value, our perspectives are still limited. Here, we explain our methods for data collection, the limitations of the data, and the individuals involved at each step.

This data is derived from PPE requests entered into the request form on our website. We accept requests from a range of frontline organizations, including healthcare facilities and organizations, natural disaster relief groups, homeless shelters, social services organizations, and many more. On our request form, we capture information on the location, size, and scale of each requesting facility and the type of care provided there. This helps us deliver the most appropriate PPE for each facility and to prioritize the most underserved, in-need communities, while taking into account logistical factors for PPE deliveries. Finally, we collect information on need—types of PPE needed, amount needed per week, how the requester/institution is currently using PPE (normally? rationing?), and how long until PPE runs out.

We maintain a large store of need and supply-related data. This data is provided by individuals and institutions across the United States in critical need of PPE. In order to ensure we have the most up-to-date information, we clean the data by removing duplicate requests and ensuring requesting facilities are only counted once.

Sometimes, individuals filling out our request form make mistakes while entering their needs and information. They may not have exact figures, or may not know answers to specific questions on the form. Our Data Verification team works to verify requesting facilities and to ensure the information they’re entering is accurate.

Get Us PPE was founded quickly and scrappily. We assumed we would not be needed long—two weeks at most—before another group would solve the PPE crisis. Yet we are still seeing PPE shortages across the country. Our original scope and mandate didn’t demand sophisticated technological architecture, but we have since adjusted. We became the architects of our own technology solutions in order to meet the immense and continued need nationwide. Over time, we have improved our request form and systems to ensure we are capturing all the information required to make the most equitable distribution choices possible. As a result, many data fields are absent from earlier requests. We are now working to fill those blanks wherever possible by retroactively providing more information about institutions requesting and their needs, allowing for improved visualization and analysis both now and in the future.

One of the largest factors driving the data we chose to compile and visualize in this index is the qualitative data obtained through numerous outreach projects to facilities nationwide. Hundreds of Get Us PPE volunteers called or emailed facilities, especially those in under-served communities and recorded their comments, many of which provide anecdotal evidence for types of shortages that may remain hidden in large datasets. The data in this document, pulled from our database, tells many of these stories quantitatively. As this crisis evolves, we will continue to employ this mixed-methods approach in order to tell the story of the PPE shortages frontline workers are experiencing on the ground every day.

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