



Indiana Hospital Association

COVID-19

Best Practices, Resources, and Guidance
for PPE Resources



Updated 5/1/20

The Indiana Hospital Association (IHA) is committed to serving our members by providing resources to help our hospitals be the best stewards of safe care. During this unprecedented time of crisis with the novel coronavirus (COVID-19), we acknowledge that hospitals are faced with unique challenges to not only provide safe care to the communities they serve, but also to keep their staff safe. Recently, IHA has received many requests for guidance on how to best handle the needs of personal protective equipment (PPE). As a practical guide, this toolkit was created to be used only as a resource for guidance on best practices, education, and examples of community resources that may be used to assist with PPE in the event of shortages. We encourage you to review these resources and establish a program that best suits the needs of your community and local resources. Realizing that each day we are receiving new information and situations change, this toolkit is not all-inclusive. IHA will post any new helpful information as we receive it on the [IHA website](#).

Patient and staff safety and healthy hospitals will always be a priority for IHA. Thank you to the members who have already begun to share their best practices during this difficult time.

Together we are better!

Shortages of PPE

With the current challenge of shortages of PPE, there has been an emergency declaration to the nation's leaders for additional resources to be sent to states as the crisis continues to unfold. In the meantime, health care systems have been challenged to create ways in which they can better prepare for the surge in COVID-19 cases. The information below was compiled from various organizations both locally and across the U.S. and is meant to be a resource for you to use should you have a PPE shortage need. Our hope is that through community engagement, including local manufacturing and businesses, strategies can be developed to help keep your community safe. We encourage you to use your organization's community outreach teams to engage in conversation with them and partner with you in this community effort.

IMPORTANT NOTE

Per the CDC: In settings where facemasks are not available, health care provider might use homemade masks (e.g., bandana, scarf) for care of patients with COVID-19 as a last resort. However, homemade masks are not considered PPE, since their capability to protect HCP is unknown. Caution should be exercised when considering this option. Homemade masks should ideally be used in combination with a face shield that covers the entire front (that extends to the chin or below) and sides of the face.

Visit the [CDC website](#) for more guidelines on PPE.

PPE Outreach Examples

Million Mask Challenge

AHA updates resources on the [Million Mask Challenge](#).

Providence Health System-Million Mask Challenge

Providence has posted information how they developed the "Million Mask Challenge." Although they are now stating that they have received help from local manufacturers to help meet their PPE needs, they have listed resources on how to make their own face shields and surgical masks, along with resources for community members who sew. The American Hospital Association (AHA) is also endorsing this campaign by facilitating support from manufacturers and the business community to help build the supply of PPE, and is connecting them with hospitals, clinics and health systems who have a need for these supplies. Please check out the recorded video that was produced with manufacturers in mind, with the use of surgical wrap to make masks in high production numbers. Instructions on how to make the masks are included in this toolkit. Please visit the [Providence Health System website](#) for all the resources for the Million Mask Challenge.

Community Health Network-Give PPE

Community Health Network has posted a form on their website that can be completed to assist with PPE donations. This form includes both donated and homemade resources, along with a record of your donation for tax purposes. When this form is completed online, a member from the Community team will reach out to the submitter and schedule a drop-off time and location. Please visit the [Community Health Network website](#) to see the process in action.

Parkview Health-Partner with Hospital Laundry Service

Using innovation as its driver, Parkview Health has partnered with the Hospital Laundry Service (HLS) and Rea Magnet Wire and Schlemmer Brothers Metal Fabrication, who are providing nose pieces to make cloth masks that can be used as backups to their main supply in the event they should have a future need. Community volunteers are invited to sew sheet masks that can be used by patients, visitors, or non-clinical workers to help contain the spread of germs. A pick-up site for the kits was established, along with drop-off locations when completed. You can find the story and email address for any questions on the [Parkview Health website](#).

Nebraska Medicine

With the national shortage of PPE, Nebraska Medicine is using a method to decontaminate PPE items using an ultraviolet light system. This system has been shown to “inactivate a wide range of human pathogens including coronavirus and other human respiratory viruses on various models of NR95 FFRs”. To read the process for decontamination of reuse of N95 masks, please visit the [Nebraska Medicine website](#).

American Senior Communities

American Senior Communities is asking the community to volunteer to make homemade face masks or to donate fabric. Please visit the [American Senior Communities website](#) for information, videos, and instructions on how to make a face mask with a filter pocket.

Henry Ford Health System

Visit this website to watch the video on the innovation that the employees of Henry Ford shared to address the shortage of PPE. Items to accomplish this task include nylon jersey fabric, elastic bands, Velcro, tongue depressors, and air filter material. Watch the video on the [Henry Ford Health System website](#).

Partners from Arizona

This website contains instructions for making your own reusable gowns. Visit the link and watch the video for instructions.

[Instructions for PPE Medical Isolation Gown Pattern](#)
[Video Instructions for PPE Medical Isolation Gown](#)

Deaconess Hospital

Visit [here](#) to watch the YouTube video on how to make a cloth mask.
Click [here](#) for the pattern.

CDC PPE Infographic

The CDC presents an [infographic](#) on how to don and doff PPE.

Additional Resources From CDC

OSHA Standards

The Centers for Disease Control and Prevention (CDC) has posted strategies for optimizing the supply of N95 respirators. The document “offers a series of strategies or options to optimize supplies of disposable N95 filtering facepiece respirators in health care settings when there is a limited supply.” Please visit the [CDC website](#) for more information.

The guidelines that CDC follows are OSHA Standard Number 1910.134-Respiratory Protection. These guidelines can be found on the [OSHA website](#).

Updated Manufacturers of Imported, Non-NIOSH-Approved Disposable Filtering Facepiece Respirators

Find the newly released (4/3/20) [guidelines](#) from the FDA on previously non-authorized FFRs manufactured in China.

CDC Guideline Statement

Currently, many health care systems are experiencing a shortage of N95 respirators. With this issue, CDC’s existing guidelines state:

- Minimize the number of individuals who need to use respiratory protection through the preferential use of engineering and administrative controls
- Use alternatives to N95 respirators (e.g., other classes of filtering facepiece respirators, elastomeric half-mask and full facepiece air purifying respirators, powered air purifying respirators) where feasible
- Implement practices allowing extended use and/or limited reuse of N95 respirators, when acceptable
- Prioritize the use of N95 respirators for those personnel at the highest risk of contracting or experiencing complications of infection

CDC Personal Protective Equipment (PPE) Burn Rate Calculator

The PPE Burn Rate Calculator is a spreadsheet-based model that provides information for health care facilities and non-health care facilities, to plan and optimize the use of PPE for response to COVID-19. This tool calculates the average consumption rate, or “burn rate” for each type of PPE. Please visit the [CDC website](#) to find this tool.

CDC Extended Use vs. Reuse

The full report of CDC recommendations can be found at on the [CDC website](#).

CDC Decontamination and Reuse of Filtering Facepiece Respirators using Contingency and Crisis Capacity Strategies

Find updated [information](#) on the care of FFRs for crisis capacity strategies.

N95 Health Care Facility Checklist

A checklist for health care facilities to optimize N95 respirators is included in this toolkit. Please visit the [CDC website](#) for access to the checklist and toolkit.

NEW N95 Decontamination Site in Indianapolis

Indiana has acquired a critical care decontamination system that will allow health care providers to conserve N95 masks by sending them off to be professionally decontaminated. ISDH will use Battelle to decontaminate N95 respirators up to 20 times, free of charge, for healthcare facilities, doctors, and EMS across Indiana starting in May. The system is located in downtown Indianapolis at 601 West McCarty Street.

To enroll in the free [Battelle](#) CCDS™ Critical Care Decontamination System program and begin decontamination services:

1. **Complete enrollment in the program:** Download the [Services Agreement](#) [doc], have your authorized representative sign it, and return by email.
2. **Get your 3-digit site code(s):** Once your signed services agreement has been sent, download and complete the [Site Locations and POC Information form](#) [xlsx] and return by email directly to Dave Giles. Once received, he will provide you a 3-digit site code for each location you listed on your form. The 3-digit codes are to be marked on each N95 respirator you collect and on the boxes that the N95s will be shipped in.
3. **Begin collecting and labeling your N95 respirators:** Each N95 respirator must be handled and labeled properly for Battelle to decontaminate it. Please review the instructions provided in the links below for details on how to collect, label, and package your respirators for shipment.
 - o [Instructions for Healthcare Personnel](#) [pdf]
 - o [Instructions for Healthcare Facilities](#) [pdf]
 - o [HCP - Fact Sheet](#) [pdf]

It is VERY IMPORTANT that every N95 is properly labeled and free of any visible soiling such as blood, bodily fluids, and makeup. Battelle cannot decontaminate N95s that do not meet these requirements.

4. When you prepare to send your N95s, you will need to download and fill out the [Chain of Custody Form](#) [xlsx]. Please provide one form per shipment.

CCDS enrolled organizations will not be charged for decontamination services. Hospital Systems have the option to work with Battelle’s shipping logistics partners, Cardinal Health or FedEx, or arrange their own shipping.

Other important details about the service are located in the [Battelle CCDS™ FAQs](#).

Websites for PPE Use and Conservation

NETEC

The National Emerging Special Pathogen Training and Education Center (NETEC) has provided a comprehensive list of flyers, videos, and checklists to help with the use and conservation of PPE during the COVID-19 crisis. These resources serve as good visual aids, along with education for those new to the use of PPE. Resources include:

- Conserving PPE
- PPE Guidance
- Putting On PPE
- Taking Off PPE
- UVGI process for Decontamination
- Reusing Face and Eye PPE-Extended Wear

Access these resources [at this weblink](#).

The Association for Professionals in Infection Control and Epidemiology (APIC)

APIC has a comprehensive section on resources for COVID-19. Find these resources here on the [APIC website](#).

Resource Links for How to Make Your Own PPE

[Face Mask for the Clinical Setting](#)

[CDC: Checklist for Healthcare Facilities: Strategies for Optimizing the Supply of N95 Respirators during the COVID-19 Response](#)

[N95 Filtering Facemask Respirator Ultraviolet Germicidal Irradiation \(UVGI\) Process for Decontamination and Reuse](#)

[Face Shield Parts](#)

[Duke Starts Innovative Decontamination of N95 Masks to Help Relieve Shortages](#)

If you have any questions or resources that you would like to add to this toolkit, please submit them to covid@ihaconnect.org.