Learn more about Battelle CCDS™ processing and what to expect next.

**Check your email**

A Battelle CCDS™ representative will be sending you an email shortly with important information on how to complete enrollment.  Please review the documentation, complete the service agreement and follow-up with your Battelle CCDS™ representative.   
  
If you haven't received an email one hour after submitting the form, please check your spam folder or contact us at solutions@battelle.org.

**What can I do now to prepare to use Battelle CCDS™?**

Detailed information on the Battelle CCDS™ collection process and how to prep N95s can be found in the following documentation:

* [Battelle FDA Emergency Use Authorization](https://battelle.org/docs/default-source/commercial-offerings/industry-solutions/battelle-eua.pdf)
* [Instructions for Healthcare Personnel](https://www.battelle.org/docs/default-source/commercial-offerings/industry-solutions/instructions-for-healthcare-personnel---03-29-2020---615pm-revision.pdf?sfvrsn=f03587d2_2)
* [Instructions for Healthcare Facilities](https://battelle.org/docs/default-source/commercial-offerings/industry-solutions/instructions-for-healthcare-facilities---03-29-2020---615pm-revision.pdf)
* [HCP - Fact Sheet](https://www.battelle.org/docs/default-source/commercial-offerings/industry-solutions/hcp---fact-sheet---battelle-face-masks---03-29-2020---615pm.pdf)

Healthcare providers can begin to stockpile used N95s immediately. Our operation sites will accept shipments once enrollment is finalized, so getting equipment ready to send now will speed the process.  
  
**You will be provided 3-digit hospital-specific site code(s) by Battelle once the signed service agreement is complete.**

**How do we get our 3-digit code?**Battelle will provide a hospital-specific 3-digit site code for each of your facilities once the CCDS service contract agreement is complete.The 3-digit site code will be used to label, with a permanent marker, your N95 respirators and the outside of the shipping boxes you use to ship. These 3-digit site codes allow the logistics tracking of your N95s.

**Important note:** Each individual N95 must be labeled, packed and shipped per the instructions and is vitally important to comply with [Battelle’s FDA EUA](https://battelle.org/docs/default-source/commercial-offerings/industry-solutions/battelle-eua.pdf) and to protect the safety of our CCDS staff.  
 **Will labeling respirators with permanent marker damage their performance?**No. Battelle has tested N95 respirators from multiple manufacturers by labeling with permanent marker as described in the FDA EUA, then decontaminating via multiple cycles of CCDS. No performance issues have been observed.  
 **Will labeling respirators with permanent marker impact decontamination effectiveness?**No. Battelle tested CCDS decontamination performance with N95 respirators labeled with permanent marker, which has a known chemistry. No issues were observed.

**Why do we have to label every N95 respirator we send?**Per the EUA issued to Battelle by the FDA, each piece should be labeled with a 3-digit healthcare facility site code. You may also include a 2-digit code for additional identification (e.g. floor, unit, etc.) at your discretion. The shipping box must also be labeled with the 3-digit site code. This labeling enables us to return the decontaminated equipment back to the healthcare facility that sent it.

**What kinds of equipment can be decontaminated?**

[Our FDA EUA](https://battelle.org/docs/default-source/commercial-offerings/industry-solutions/battelle-eua.pdf) is for N95 respirators. It covers any N95s (healthcare and industrial) that are not cellulose based. Respirators must be certified by NIOSH as an N95. If NIOSH hasn’t certified it, Battelle does not recommend decontamination via our process.

[Battelle’s EUA](https://battelle.org/docs/default-source/commercial-offerings/industry-solutions/battelle-eua.pdf) does not cover decontamination of PAPR hoods, face shields or other types of PPE and we are not processing these at this time. We are conducting studies to determine other items that would be suitable for decontamination with this process, and what data would be required to achieve FDA authorization for use.  
  
**Important note:** All N95 respirators must be free of makeup, blood and other soiling in order to be decontaminated.   
 **Why does makeup and other soiling on respirators impact the decontamination process?**Makeup and other soiling have widely varied chemical compositions and it is not possible to test all of the possible chemistries, so we cannot advise that soiled masks are properly decontaminated.

**How do we get our N95 respirators to Battelle?**

If you are a hospital system, you may work with Battelle’s preferred logistics provider, Cardinal Health, for end-to-end delivery service, or use the logistics provider of your choice.

For healthcare providers such as first responders, ambulatory services, assisted living facilities, hospice centers, clinics, law enforcement and others – you may use a logistics provider that is able to transport biohazardous material to CCDS. For the return of decontaminated N95s, any carrier may be used as the N95s are no longer biohazardous.

Depending on your choice of transportation option, you will coordinate the logistics of your N95 respirators with your logistics provider.

**What is the turnaround time for healthcare providers to get their N95s back?**

Battelle’s goal is to have decontaminated N95 respirators ready for shipment back to the originating healthcare provider within 72 hours of receipt. Processing and turnaround time will depend on the volume of incoming respirators.

**What happens when we send Battelle N95s?**

Once the shipment arrives at Battelle, we will log and barcode the received respirators received according to your assigned site code labeled on each mask. We track all the production lot information including healthcare provider and number of masks processed.

We visually inspect all N95s for damage and soiling from blood, bodily fluids, or makeup. Any soiled or damaged masks will be discarded appropriately and not returned to the healthcare provider.

After decontamination, the masks are marked to keep track of the number of times they have been decontaminated. They are placed into a clean box that is labeled with the healthcare provider code so it can be returned to the originating healthcare provider.  About 120 – 150 decontaminated N95s can fit into a box.

We generate a shipment form that is included with every return shipment, which includes the number of N95s successfully decontaminated.

The point of contact you provide during enrollment will be notified that masks have been decontaminated and are ready for transport back to you via your chosen transport method.

**What is your processing capacity?**

Battelle is accepting N95s seven days a week at most active sites. At full capacity, the Battelle CCDS™ system can be run 24/7.

**How does the decontamination process work?**

Battelle CCDS™ can decontaminate thousands of N95 respirators using concentrated, Vapor Phase Hydrogen Peroxide (VPHP). The respirators are exposed at the validated concentration level to decontaminate biological contaminants, including the SARS-CoV-2. Battelle CCDS™ can decontaminate the same N95 respirator multiple times without degrading N95 respirator performance.

**How do you know the VHP process is effective and safe?**

To validate the efficacy of VPHP to decontaminate SARS-CoV-2, Battelle spiked N95 respirator masks and other forms of personal protective equipment (PPE) with SARS-CoV-2 and exposed these to our VPHP process. [The results showed](https://www.battelle.org/docs/default-source/commercial-offerings/industry-solutions/732_battelle-critical-care-decon-system_technical-summaryf.pdf) that VPHP renders SARS-CoV-2 non-infectious for filtering facial respirators (FFRs) and other healthcare-related PPE. In fact, zero viable SARS-CoV-2 was recovered in our test samples post VPHP decontamination. For routine decontamination runs, Battelle uses a standard chemical indicator to confirm that the appropriate levels of VPHP were achieved during the process to achieve decontamination.

Battelle has demonstrated VPHP process penetrates all filter layers using two methods that simulate real-world contamination scenarios: a large droplet inoculation to simulate a splash contamination, and an aerosol inoculation to simulate contamination by airborne route. Using the industry-standard biological indicator organism for hydrogen peroxide-based decontamination *(Geobacillus stearothermophilus, or G. stearo)*, Battelle achieved a 6-log inactivation of the organism. FDA recognizes and requires this 6-log spore inactivation threshold to prove sterilization of medical devices, as it ensures decontamination of both viruses and other nosocomial pathogens.

We confirm that the hydrogen peroxide is removed from N95s prior to re-use using handheld monitors. Battelle tests masks from each run to ensure they are below the permissible exposure limit (PEL) of 1 ppm. No significant residual odor has been reported.

Battelle CCDS™ can decontaminate the same N95 respirator up to 20 times without degrading performance. Respirators are marked numerically each time they are decontaminated to track the number of cycles each has been through.