



Takeaways from MHA Webinar:

Maximizing the Battelle N95 Decontamination System for Your Hospital's PPE Needs

April 30, 2020

Overview

Having reliable access to Personal Protective Equipment (PPE) is critical to ensuring the safety of healthcare workers and patients during the COVID-19 pandemic. During this time, however, the supply chain for PPE and particularly for N95 masks has been unpredictable. In March 2020, under Emergency Use Authorization FDA authorized use of the Battelle CCDS Critical Care Decontamination System. On April 11, 2020, the first such system came online in Somerville, MA and the decontamination service is open and available at no cost to hospitals and healthcare providers in the state. Similar systems are now being deployed across the country. In this webinar, Phil Licari, Vice President of Operations for Innovation at Partners Healthcare, and Danielle Le Hals, Executive Director of Mass General Hospital's Department of Radiation and Oncology, discuss the details of the system and the practices Massachusetts General Hospital (MGH) has put in place to manage the safe and effective collection, labeling and redistribution of N95 masks.

Lessons Learned in Using the Battelle Critical Care Decontamination System

System Overview. The Battelle system is a self-contained, mobile decontamination system that uses vapor phase hydrogen peroxide (VPHP) to decontaminate N95 masks. It has been verified in mask fit, filtration efficiency, kill levels of both bacteria and viruses and specifically against SARS-CoV-2. The FDA has authorized this method under an Emergency Use Authorization process. The aim of the system is to supplement new N95 mask inventory until additional product supply has been established and is being used to help hospitals get through the "peaks" associated with COVID-19. Battelle manages their own process within the Battelle facility and is highly reliable. The system is open to large and small physician practices and other health care organizations that want to decontaminate masks.

Process Flow. Instead of using the user blind method, MGH has decided to return decontaminated masks back to the index user. Users are required to label a new mask with their names and unit code on the outside of the mask and then deposit used masks into a collection bin at the end of the day. Environmental services collect labeled N95s and package them for Battelle. Battelle's courier service team will collect the masks from the hospital and bring them to the system facility in Somerville, MA for decontamination. The decontamination process takes one day. As part of the process, Battelle verifies the masks to ensure they are free of decontamination. Courier service then delivers the

individually labeled reprocessed N95s back to the hospital to their centralized sterilization group, where they are grouped based on unit numbers. Lastly, staff pick up their reprocessed N95 mask from a centralized station for reuse.

Communication. MGH does not require staff to participate, but has invested heavily in staff education, feedback and engagement through signage, town halls, and emails to address any staff questions about the process and science behind it. For example, MGH moved from a user blind program to an index user program based on staff feedback and the comfort knowing that the mask would be returned to the same user. Hospitals should be able to respond and adapt to real-time feedback from the program. Additionally, it is important to implement surveillance after the initial implementation of the program to continue increasing participation and interest.

Implementation. Hospital preparation is complex and will not happen overnight. Timing and logistics are important. MGH delivers approximately 10,000 masks to the Battelle system every week in two separate scheduled shipments.

Contact Information. For questions and/or to connect directly with Battelle about the system, please reach out to Andre Lafreniere at Battelle at: lafreniere@battelle.org