

Battelle Develops System to Decontaminate Personal Protective Equipment to Meet Growing Demand During COVID-19 Crisis

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COLUMBUS, Ohio (March 29, 2020)—Battelle announced today that it has received Food and Drug Administration (FDA) Emergency Use Authorization (EUA) to support front-line healthcare workers as they face critical shortages of personal protective equipment (PPE).

The Battelle CCDS Critical Care Decontamination System™ is now operating at Battelle's West Jefferson, Ohio facility under the EUA and is capable of decontaminating up to 80,000 respirator masks per system each day using concentrated, vapor phase hydrogen peroxide (VPHP). The respirator masks are exposed to the validated concentration level for 2.5 hours to decontaminate biological contaminants, including SARS-CoV-2. Battelle CCDS™ can decontaminate the same respirator mask up to 20 times without degrading the mask's performance.

"I want to thank the FDA team for their professionalism and help in authorizing the use of our technology at this critical moment for our nation," said Lou Von Thaer, President and CEO of Battelle. "Everybody who has worked on this project shares the same goal of protecting first responders and healthcare workers who are at the front lines of the pandemic."

Ohio Gov. Mike DeWine, Lt. Gov. Jon Husted, U.S. Sen. Sherrod Brown, U.S. Sen. Rob Portman, U.S. Rep. Troy Balderson, U.S. Rep. Steve Stivers, U.S. Rep. Joyce Beatty and the Ohio Hospital Association helped Battelle in securing the FDA authorization.

"I want to thank President Trump for his leadership and Dr. Hahn of the FDA for approving the use of this life-saving technology that Battelle has developed," said Ohio Governor Mike DeWine. "This will not only help Ohio's healthcare workers on the front lines of the COVID-19 crisis, but Battelle will also be helping health care workers in hot spots throughout the country including New York and Washington state."

"We're grateful for the support of our state and federal officials and other business partners," added Matthew Vaughan, Senior Vice President of Battelle's Contract Research Organization. "All parts of Battelle are working extended hours and weekends to ramp up manufacturing and operation of the Critical Care Decontamination System. Our partnership with Central Ohio healthcare systems has been crucial to working out critical details."

OhioHealth, headquartered in Columbus, has been deeply engaged with Battelle over the past two weeks to iron out logistical and operational aspects of the system. Battelle is currently processing N95 respirator masks for OhioHealth and will begin processing respirator masks for three other major systems starting this week.

“We are very encouraged by these new developments and are proud to support Battelle in this important work,” said Chris Clinton, vice president of Shared Services at OhioHealth. “It will have a significant impact on helping caregivers have the supplies they need to remain safe and to deliver critical care when it is needed most.”

Healthcare systems that wish to use Battelle CCDS™ will collect worn respirator masks daily in accordance with an approved procedure and courier these respirator masks to Battelle CCDS™ operations as systems come online. The PPE will be labeled with a barcoded serial number for tracking the chain-of-custody throughout the process. This ensures that the hospital system receives its own masks back. Each respirator mask will be marked with the number of times that mask has been processed.

Hospital systems and other agencies who wish to learn more about this system are asked to visit www.battelle.org/decon or contact Battelle directly at: 1-800-201-2011.

For decades, Battelle has served the military in protecting troops from chemical and biological hazards. The company operates Biosafety Level 2 and 3 labs where research is performed on live viruses, including SARS-CoV-2. Battelle also has a full medical device development team that works with the FDA on a regular basis.

Battelle CCDS™ is based on research that Battelle performed for the FDA in 2015 (Richter et al., 2016) to assess the feasibility to decontaminate N95 respirator masks in the event of a PPE shortage resulting from a pandemic. In that [FDA study](#) VPHP decontamination, using the same system parameters and critical end points as the current system, was shown to result in 6-log reduction of *G. stearothermophilus* while not degrading the filter performance of N95 respirators for multiple decontamination cycles. Battelle is currently conducting research to validate that other equipment, including surgical masks and ventilator components, can be decontaminated using this process.

About Battelle

Every day, the people of Battelle apply science and technology to solving what matters most. At major technology centers and national laboratories around the world, Battelle conducts research and development, designs and manufactures products, and delivers critical services for government and commercial customers. Headquartered in Columbus, Ohio since its founding in 1929, Battelle serves the national security, health and life sciences, and energy and environmental industries. For more information, visit www.battelle.org.

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