Michigan State University Develops Decontamination Method To Reuse N95s

Michigan State University

Michigan State University is using specialized equipment to clean and decontaminate used N95 masks to increase their lifespan and curtail their shortage in the fight against coronavirus.

This is especially critical when supplies of N95 respirators are insufficient during the COVID-19 pandemic. MSU has a pending application for an emergency use authorization (EUA) from the U.S. Food and Drug Administration for its system.

> *To create the system, staff at MSU's Extension Food Processing Innovation Center reviewed scientific literature on coronavirus disinfection and adapted food-processing practices using large-scale commercial ovens.*

Staff retooled their equipment to heat the masks in such a way it kills viruses and bacteria. This dry heat process can

be replicated in most commercial ovens and allows masks to be disinfected up to 20 times. The masks are then sealed in individual bags and left to further decontaminate for three days before being returned.

MSU Technologies, the technology transfer office at MSU, has assisted the staff involved in this development by working through commercialization hurdles in real-time at the university. MSU has signed on to the AUTM COVID-19 licensing principles and accordingly, drafted an agreement that facilitated the royalty-free sharing of the disinfection technology with all interested parties.

Prior to receiving the emergency use authorization from the FDA, MSU is openly sharing information on the process, to allow others to quickly develop their own and expand the life span of available N95 masks. When MSU's End User Agreement is completed, the applicant is emailed a packet including general protocol for the system, efficiency measurements, fact sheets, and record keeping forms.

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