CDC Limited Re-Use of N95/kN95 Facemasks

While disposable filtering facepiece respirators (FFRs), like N95s, are not approved for routine decontamination as conventional standards of care, N95/kN95 decontamination and reuse may be needed during times of shortage to ensure continued availability. Based on the limited research available, as of April 2020, ultraviolet germicidal irradiation, vaporous hydrogen peroxide, and moist heat have shown the most promise as potential methods to decontaminate N95/kN95s.

Alternative to Decontamination

One strategy to mitigate the contact transfer of pathogens from the N95/kN95 to the wearer during reuse is to issue five respirators to each healthcare worker who may care for patients with suspected or confirmed COVID-19. The healthcare worker will wear one respirator each day and store it in a breathable paper bag at the end of each shift. The order of N95/kN95 use should be repeated with a minimum of five days between each N95 use.

This will result in each worker requiring a minimum of five N95/kN95s, providing that they put on, take off, care for them, and store them properly each day. Healthcare workers should treat the N95/kN95s as though they are still contaminated and follow the precautions outlined in our reuse recommendations. If supplies are even more constrained and five respirators are not available for each worker who needs them, N95/kN95 decontamination may be necessary. 1

Before using any decontamination method, it should be evaluated for its ability to retain 1) filtration performance, 2) fit characteristics achieved prior to decontamination, and 3) safety of the FFR for the wearer (e.g. by inactivating SARS-CoV2). On March 29, 2020, the U.S. Food and Drug Administration (FDA) issued the first Emergency Use Authorization (EUA) for a decontamination process, and additional subsequent EUAs have been issued.

For decontamination methods, see Decontamination and Reuse of Filtering Facepiece Respirators