

Disinfecting Scott Health & Safety's Xcel Elastomeric Half-Mask



There are an increasing number of respirators used for emergency medical aid responses and in healthcare environments to protect against airborne, respiratory hazards (i.e. Influenza Type A, subtype H1N1). The Center for Disease Control (CDC) does offer alternatives to disposable respirators such as elastomeric half-masks. Elastomeric half-masks can be suggested in high-risk response situations, when conducting higher-risk activities or when N95 disposable respirators are not available. Increased durability, ability to clean and the option of multiple-use are reasons to choose elastomeric respirators versus disposable filtering facepieces.

The CDC defines “re-use” of a respirator, “where the respirator is removed and re-donned between patient encounters” by the same user. The CDC refers to “extended use” of a respirator when a user is, “wearing over multiple encounters while minimizing touching, removing, or re-donning between encounters.” Both of these practices will increase the useful life of your existing supply of respirators. Practice good hand hygiene before and after touching the respirator and avoid touching the inside of the respirator. The CDC specifically recommends disposal of N95 respirators after performing aerosol generating procedures or if the N95 is contaminated with patient blood, secretions or other bodily fluids.

Occupational Safety & Health Administration (OSHA) 1910.134 defines the respiratory protection program requirements. Within OSHA 1910.134 there are guidelines for inspecting, cleaning and disinfecting. In addition to the below guideline categories the respirator must be visually inspected prior to and following each use. Below are four guideline categories to define procedures:

- (1) “Respirators issued for the exclusive use of an employee shall be cleaned and disinfected as often as necessary to be maintained in a sanitary condition;”
- (2) “Respirators issued to more than one employee shall be cleaned and disinfected before being worn by different individuals;”
- (3) “Respirators maintained for emergency use shall be cleaned and disinfected after each use; and”
- (4) “Respirators used in fit testing and training shall be cleaned and disinfected after each use.”

For the purpose of “re-use” and “extended use” of respirators by a single individual, the respirator would require inspecting, cleaning and disinfecting as necessary. Reliable disinfection of the Scott Xcel elastomeric half-mask consists of thoroughly wiping the respirator oral nasal, filter housings, exhalation covers and filter covers with quaternary ammonium wipes. Liquid diluted quaternary ammonium dabbed on with a lint free cloth according to the manufacturer’s instructions, standard chlorine bleach with water (diluted to 1:64), Isopropyl alcohol (IPA) wipes and IPA liquid dabbed on with a lint free cloth are also effective forms of disinfection between patient encounters for an individually issued elastomeric respirator.

Utilizing the above procedures between patient encounters for an individually issued elastomeric respirator should not be the primary disinfectant method when the respirators are shared by different individuals or stored for emergency use. OSHA 1910.134 Appendix B-2 and the respirator user instructions should be referenced when the respirators are shared by users.