Immersion Cleaning and Disinfection of Elastomeric Half Mask Facepiece Reusable Air Purifying Respirators (EHMR)

Elastomeric Half Mask Facepiece Reusable Air Purifying Respirators with P100 filters (EHMR) should be stored in a clean plastic bag. During use, they should be decontaminated with grey-top sani-wipes each time they are doffed and at the end of a shift, as described in the EHMR P100 Mask Use Procedures (https://pulse.utah.edu/site/anesthesiology/Documents/COVID-19/PPE/Additional%20Resources/EHMR%20P100%20Mask%20Use.pdf).

EHMR should be immersion cleaned and disinfected after five days of use, as well as:

- After every case in a patient with confirmed or suspected Covid-19
- At the end of a shift that included aerodigestive cases

When an EHMR requires immersive cleaning, it can be performed by an individual clinician or by the EHMR cleaning team. Before immersive cleaning, carefully decontaminate the EHMR with a grey-top sani-wipe as usual.

For individual cleaning: Place the EHMR in a storage bag and transport to the designated cleaning area.

For central cleaning: After decontamination, place the filter cartridges in a labeled storage bag. Place the labeled mask and splashguards (not the filters) in the dirty EHMR bin in the Anesthesia Workroom

Preparation

The cleaning and disinfection process requires about 15-20 minutes.

- Place the decontaminated EHMR or dirty EHMR bin near the sink, on the designated contaminated surface. Although each EHMR has been decontaminated, treat the mask or the bin and the surrounding surface as contaminated.
- For central cleaning, up to five masks can be cleaned (individually) before changing out the cleaning solutions.
- Place two 2-gallon buckets in the sink.
- Fill each with one gallon of warm water (less than 48C/120F)
- Add 15 ml (½ ounce) dishwashing liquid to one bucket
- Add 4 ml beach to the other bucket
- Place Chux and a clean plastic storage bag on the designated clean surface
  - Clean storage bags can be re-used
Cleaning and Disinfection

- Perform hand hygiene
- Don liquid-resistant gown, jacket, or surgical sleeves; droplet face mask; face shield; and clean gloves.
- Ensure that filters and splashguards have been removed from the mask.
- Carefully wipe filters with a grey-top sani-wipe, being careful to ensure the filter material does not get wet, and place on clean Chux.
- Place splashguards and mask (including straps) in the first bucket (dishwashing liquid).
  - Be careful not to splash liquid out of the bucket
- Gently and thoroughly clean inside and outside of mask and splashguards with soft bristle brush.
  - Take care not to fold or damage internal valves.
- Rinse all components thoroughly in running water, taking care to minimize splashing.
- Submerge in second bucket (bleach) for 2 minutes.
  - The face mask should be turned face down to prevent air pockets.
  - Use the tongs to keep all components submerged.
  - Be careful not to splash liquid out of the bucket.
- While the EHMR soaks in bleach, clean dirty surfaces (faucet handles, surface EHMR was on) with grey-top sani-wipe.
- Discard gloves and perform hand hygiene. Don new gloves.
- Rinse all components thoroughly in running water, taking care to minimize splashing.
- Place on Chux on clean surface to dry or dry with a lint-free cloth.
- When dry, reassemble and store in clean plastic storage bag.
- Empty buckets (taking care to avoid splashing) and clean buckets and sink area with grey-top sani-wipes.
- Remove PPE and perform hand hygiene.

References:
https://www.ajicjournal.org/article/S0196-6553(15)00089-9/fulltext