



Emergency Medical Services N-95 Mask Recycling

Available at OhioHealth Emergency Departments.

BACKGROUND:

- Due to national shortage, **OhioHealth and Battelle** are working together to process, decontaminate, and reuse PPE in a safe and efficient manner.
- Battelle uses **high concentration vaporized hydrogen peroxide** for decontamination.
- With this process, **N95s** may be decontaminated up to 50 times before filter degradation occurs. **Elastic straps** typically degrade after 20 cycles. Once straps degrade, the mask should be discarded.

FREQUENTLY ASKED QUESTIONS:

1. **What is the process like?** Vaporized hydrogen peroxide is used to decontaminate items. It is advantageous as it can be used on moisture and heat sensitive materials. We already use hydrogen peroxide vapor at low concentration in sterile processing at OhioHealth.
2. **How do we know it works?** High concentration vapor decontamination reaches a concentration of 200-1000 ppm. Studies have shown only 25 ppm are needed to decontaminate against common viruses and even spores.
3. **Does this work against the COVID-19?** Yes
4. **What PPE is eligible for recycling?** N95 masks only. For eye protection, we recommend the user decontaminate these items per local protocol.
5. **Is it safe to use the equipment?** Since hydrogen peroxide vapor breaks down to water and oxygen, it is safe to use and does not leave residue.
6. **Why do I need to label my mask?** This facilitates its return to the individual user.
7. **Will anything prevent my mask from being decontaminated?** Yes. N-95 with make-up on them cannot be reprocessed. Make-up renders the masks unusable. Advise all providers that face makeup should not be worn.
8. **When will I see my mask?** So far, we see returns in about two days.
9. **Why are we doing this now?** We see this as a proactive, sustainable and inventive means to help protect EMS providers.



MASK LABELING

If PPE is not labeled appropriately, it cannot be returned!
Use a **Sharpie** to label your N95 mask with these **identifiers**:

1. Your Name or Initials
2. Your Agency Name
3. EMS
4. Hospital Drop-Off Site

MASK DROP-OFF

N-95 recycling containers are provided for EMS near the ambulance entrance of our emergency departments.

PPE that is grossly contaminated or broken should be placed into a general contaminated waste container.



MASK PICK-UP

EMS providers will pick up their decontaminated masks on the unit where it was dropped-off.

The number of decontamination cycles will be marked on the mask.

MASK DEGRADATION

If elastic straps are degraded, discard the mask.

Masks have been validated to maintain proper fit and seal with up to 20 reuses. Ensure you perform a seal check upon donning.

