

Guidelines for the Use of Different Models of N95 Respirators at Duke Health

N95 respirators (or PAPRs) continue to be required for direct care of patients on Airborne (e.g., tuberculosis, measles) or Special Airborne Contact (e.g., suspected or confirmed COVID infection) precautions. Additionally, the CDC recommends that healthcare workers in areas where there is moderate to substantial community transmission of COVID-19 use N95 respirators when performing procedures that are high-risk for generating aerosols, since healthcare workers in facilities with moderate to substantial community transmission are more likely to encounter asymptomatic or pre-symptomatic patients who may be COVID-19 positive. This can include patients who tested negative during their pre-procedure test, but then develop symptoms in subsequent days. To accommodate these recommendations, Duke has made additions to the recommended PPE for staff in perioperative and procedural areas where high-risk aerosol-generating procedures are performed. **This document has been updated to include two additional types of N95 respirators.**

Additionally, to ensure availability of N95 respirators when needed, DUHS has deployed new models of N95s to certain care areas. Staff should use the N95 respirator model that is available at their location and per instructions of their local leadership. We have answered several frequently asked questions and highlighted key features of the different types of N95 respirators in the table below.

Frequently Asked Questions

Q: Do N95 respirators with valves provide the same level of protection as a non-valved N95?

A: Yes, for the wearer, because what the wearer inhales is filtered the same with or without a valve. The difference is that the wearer exhales out through the exhalation valve such that it does not provide the same level of source control for those around the wearer. Wearing a surgical mask on top of these respirators protects those whom the wearer encounters.

Q: What are the current recommendations to safely wear an N95 respirator, with or without an exhalation valve?

A: Performing a real-time seal check is required to ensure that the N95 has the appropriate fit and seal before using. Please see links provided under each mask type below for specific seal check instructions.

Q: If I have been given a 3M 8511 or Halyard N95 to wear in the peri-op or procedural space, can I reuse it for multiple days in a row?

A: The respirator should be properly doffed and stored after use. It may be used up to 5 separate days, a minimum of 3 days apart. If day one is the day the respirator is used (example Monday), then do not reuse the respirator until Thursday. If you work 5 days per week, you could receive 5 respirators and label them for each day of the week so that you don't reuse a respirator until the following week.

Q: Can I just don my N95 respirator and keep it on for the entirety of my shift?

A: N95 respirators should be worn when indicated. They should be doffed and stored safely in between uses per the instructions linked in the table below.

General locations where different models of N95 respirators are used	INPATIENT/OUTPATIENT LOCATIONS		PROCEDURAL/PERI-OP LOCATIONS		
Examples					
Model Name	3M 1860/1860S N95 Surgical Respirator	3M 1870 Plus N95 Surgical Respirator	3M 8210/8110S N95 Non-Surgical Respirator	3M 8511 N95 Non-Surgical Respirator with Valve	Halyard N95 Surgical Respirator (small and regular)
Fluid resistant?	Yes	Yes	No	No	Yes
Additional surgical mask over N95 respirator?	No	No	Yes, if you are performing a procedures/surgery	Yes, to provide source control and fluid resistance	No
Eye protection?	Face shield (for care of patients on SAC precautions) Goggles/safety glasses (for care of patients not on SAC precautions)				
Fit?	Standard mask for which staff were fit-tested for prior to suspending fit-testing	Different fit than standard mask for which staff were previously fit-tested; one size fits most	Same fit as standard mask for which staff were fit-tested for prior to suspending fit-testing	Different fit than standard mask for which staff were previously fit-tested; one size fits most	Different fit than standard mask for which staff were previously fit-tested; comes in small and regular size
Seal Check Instructions: Always perform a “seal check” prior to each use	https://covid-19.dukehealth.org/documents/n95-seal-check-instructions	https://covid-19.dukehealth.org/documents/3m-1870-plus-n95-seal-check-instructions	https://covid-19.dukehealth.org/documents/n95-seal-check-instructions	https://covid-19.dukehealth.org/documents/instructions-performing-seal-check-valved-n95-respirator	https://covid-19.dukehealth.org/documents/halyard-n95-respirator-seal-check-instructions
Reprocessing?	No: N95 reprocessing has stopped at DUHS				
Reuse?	Approved for extended use. Discard at end of shift.		Approved for extended use and reuse. May be reused up to 5 times, a minimum of 3 days apart.		
Donning and Doffing?	Must be donned, doffed and stored carefully according to published DUHS guidance to avoid contamination: https://covid-19.dukehealth.org/documents/n95-respirators-and-face-shields-instructions-extended-use-and-re-use				