

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, CDC has updated their guidelines and now recommends 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 implemented changes in recommended PPE for staff in perioperative and procedural areas where high-risk aerosol-generating procedures are performed.

Additionally, to ensure availability of N95 respirators when needed, DUHS has deployed new models of N95s to certain care areas. Staff may notice that DUHS now supplies N95 respirators that have a valve. 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 <https://covid-19.dukehealth.org/documents/n95-seal-check-instructions> for N95 respirators without valves <https://covid-19.dukehealth.org/documents/instructions-performing-seal-check-valved-n95-respirator> for valved N95s.

Q: If I have been given a 3M 8511 mask to wear, 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.

			
Model Name	3M 1860/1860S N95 Surgical Respirator	3M 8210/8110S N95 Non-Surgical Respirator	3M 8511 N95 Respirator with Valve
Fluid resistant?	Yes	No	No
Additional PPE required?	-Face shield	-Face shield.	-Surgical or ear loop mask over top -Face shield or goggles
Fit?	Standard mask for which staff were fit tested for prior to suspending fit testing Always perform a “Seal Check” prior to each use: https://covid-19.dukehealth.org/documents/n95-seal-check-instructions	Same fit as standard mask for which staff were fit tested for prior to suspending fit testing Always perform a “Seal Check” prior to each use: https://covid-19.dukehealth.org/documents/n95-seal-check-instructions	Different fit than standard mask for which staff were previously fit tested; one-size fits most Always perform a “Seal Check” prior to each use: https://covid-19.dukehealth.org/documents/instruction-s-performing-seal-check-valved-n95-respirator
Reprocessing?	Can be reprocessed. Immediately place in appropriate reprocessing bin following high-risk aerosol-generating procedures (AGPs). If no high-risk AGPs have occurred, reuse according to DUHS guidance and place in appropriate reprocessing bin at the end of shift. If N95 is visibly soiled or damaged, discard in appropriate trash.	Can be reprocessed. Immediately place in appropriate reprocessing bin following high-risk aerosol-generating procedures (AGPs). If no high-risk AGPs have occurred, reuse according to DUHS guidance and place in appropriate reprocessing bin at the end of shift. If N95 is visibly soiled or damaged, discard in appropriate trash.	Do NOT REPROCESS. Can 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-	Must be donned, doffed and stored carefully according to published DUHS guidance to avoid contamination: https://covid-19.dukehealth.org/documents/n95-	Must be donned and doffed 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 .

	respirators-and-face-shields-instructions-extended-use-and-re-use.	respirators-and-face-shields-instructions-extended-use-and-re-use.	
Source Control?	Provides source control to prevent transmission of infectious droplets and aerosols from the wearer.	Provides source control to prevent transmission of infectious droplets and aerosols from the wearer.	Does not provide source control to prevent transmission of infectious droplets and aerosols from the wearer. Must be worn with a surgical or ear loop mask over top to provide source control.