PPE Covid-19 issues relating to MR Safety

Staff PPE

- N95 masks for staff used in direct patient care for COVID positive or COVID suspect patients (also known as PUI- person under investigation)
- Surgical masks worn by staff daily in direct patient care areas

Patients

- Surgical masks for all patients all the time.

Staff

N95 PPE for Staff. Many (not all) N95 masks have a nose strip that is slightly ferrous. When donning PPE in preparation for the MR environment, staff should perform a second fit test next to the magnet to confirm the seal is consistent and not being pulled by the magnet. Staff can add tape around the seal for additional counterforce if required. This personal check should be performed every time you plan on entering Zone 4, especially with a new model N95 you have never previously used.

Surgical masks worn by staff. Unknown brands of surgical masks should be secured in place and then tested by MR staff. The test can be performed by standing near the magnet in zone 4. If enough ferrous material is present to move the mask away from the face, tape can be used to increase counterforce or the mask can be swapped out for a nonferrous mask (if available). There is no risk of a thermal injury, as the mask will not be exposed to any RF energy.

Patients

Surgical masks worn by patients during an MRI exam pose the risks of ferrous material pulling away from the face or a thermal injury. The patient’s mask should be a brand and model that MR staff have experience with in the MRI environment.

Inpatients. Before initiating transport for a COVID positive or COVID suspect patient, the mask worn by the patient needs to be identified by MR staff and confirmed to be a model with which they are familiar. This can be done by photo communication with the RN or a visual inspection on the floor from a safe distance. If the mask needs to be swapped out, the MRI department will deliver the correct mask to the floor. It should be swapped out in the patient’s room before travel to MRI.

Outpatients: No homemade masks allowed. If a mask swap is needed, it can be performed in zone 4, and the staff can monitor through the control room window. After the patient has completed the exam and left Zone 4, the magnet room will to be cleaned. If patient was COVID positive or PUI AND could not keep mask on, then room will be unavailable for use for one hour. For all other situations, standard cleaning will be performed of all patient surface’s, high touch areas, horizontal surfaces with no room down time needed.
**Ventilator process** is unchanged with the exception that all COVID positive or COVID suspect patients will be brought into Zone 4 head first. The transport vent will be brought to the threshold of zone 4 (the doorway). This will allow for ventilation tube length to be maximized into zone 4, allowing for the tube-to-tube transfer to be performed inside zone 4. Zone 4 will be cleaned and will then be unavailable for use for one hour for any PUI or COVID positive patient as this process may result in some aerosol release into Zone 4.

**Scanning Multiple Positive or COVID Suspect Patients**

If a Positive COVID patient is scanned, another Positive COVID patient may be scanned without terminal cleaning or one hour wait, as long as there are neither patient has an additional airborne infection.

A Positive COVID patient may immediately follow a COVID suspect patient without one hour downtime. However, following a scan of a Positive COVID patient, a COVID suspect patient will be scanned only after proper cleaning and one hour downtime.

**Below is a variety of surgical masks by Halyard for reference**