ACR Guidance on COVID-19 and MR Use

For patients known to have tested positive for or are Persons Under Investigation (PUI) for COVID-19, the American College of Radiology (ACR) recommends that practitioners minimize the use of MR except where absolutely necessary, and postpone all non-urgent or non-emergent exams. In some cases, the use of alternative imaging methods such as point of care or portable imaging may be appropriate. As with all imaging, the impact of the results of the imaging must potentially affect imminent clinical management.

The ACR also recommends the following:

Cleaning guidance

MR room cleaning and disinfecting protocols are quite varied and are subject to change with the unique clinical circumstances of that particular site (e.g., availability of PPE, emergent need for truly immediate access to the only available but not yet disinfected MR scanner for an non-COVID patient, etc.). General guidelines exist, such as 60 minute down-time followed by cleaning protocol with approved cleaning agents following a clockwise, linear, top to bottom pattern of cleaning all visible surfaces. However, these will be tempered by local guidelines and policies and especially the specific clinical needs of the patients and site, and are likely to change over time.

MR exams for patients utilizing standard surgical face masks (non-N95 respirators)

If there is a metal strip in the surgical mask in-patients should be fit with known MR Safe masks or respirators, prior to coming to the radiology department. Alternatively, when this is not possible, metallic components from a face mask should be removed prior to, or when necessary, upon the patient's arrival at the MR suite. Tape may be applied across the bridge of the nose section of the mask after removing the metal strip if the site feels that this would be sufficient for adequate fomite control and to maintain the intended function of the mask. If the patient has a tracheostomy, a face mask without metallic component should also be placed over the tracheostomy.

MRI examinations with non-MR Conditional masks is strongly discouraged. If absolutely necessary for unanticipated reasons, lowering SAR values and/or shortening RF transmission durations and/or introducing cool-down periods between scans may help minimize the risks of patient injury. Note: These will all result in longer study times for that patient.

Personal Protective Equipment (PPE) worn by MR Technologists and other healthcare personnel entering Zone IV

- 1. Powered air-purifying respirators (PAPR) should not be brought into Zone IV due to the potential risks of adverse interactions with ferromagnetic components of the PAPR system.
- 2. As PPE worn by healthcare personnel are not expected to be exposed to the time varying RF or gradient magnetic fields of the MR imaging environment, the only MR-related safety concern is that of potentially ferromagnetic components of the PPE (e.g., staples, metallic band inserts, etc.) and possible translational and rotational forces that the static magnetic field and the static magnetic field gradient may exert upon them. For such equipment, potential risks can be mitigated by ensuring that no ferromagnetic components are present in the PPE or by removing such components and replacing them with tape (if possible to do so without adversely affecting their intended isolation functionality).

Additional Resources

ACR Recommendations for the use of Chest Radiography and Computed Tomography (CT) for Suspected COVID-19 Infection (/Advocacy-and-Economics/ACR-Position-Statements/Recommendations-for-Chest-Radiography-and-CT-for-Suspected-COVID19-Infection)

COVID-19: ACR Statement on Nuclear Medicine Ventilation Scans (/Advocacy-and-Economics/ACR-Position-Statements/COVID19-Nuclear-Medicine-Ventilation-Scans)

COVID-19 Legislative Activity (/Advocacy-and-Economics/COVID-19-Legislative-Activity)

ACR COVID-19 Radiology Leadership Resources (/Practice-Management-Quality-Informatics/Radiology-Leadership-Institute/COVID-19-Leadership-Resources)

ACR Coronavirus (COVID-19) Resources

The ACR will provide up to date resources to help the radiology community battle the coronavirus (COVID-19) and strengthen radiology practices during this pandemic.

Access ACR COVID-19 Resources » (/Coronavirus-Covid-19-Resources)