I. PURPOSE

To avoid injury in the MRI during a Fire

II. DEFINITION

III. POLICY

The following procedure must be followed in the event of a fire in the MRI Suite. NO FERROMAGNETIC FIRE EQUIPMENT SHOULD BE BROUGHT INTO THE SCAN ROOM UNTIL MAGNET IS “QUENCHED”

IV. RESPONSIBILITIES

Nursing Staff, MRI Technologist, MRI Staff and Radiologists

V. PROCEDURES /GUIDELINES

Fire:

FIREFIGHTERS, POLICE AND SECURITY CONSIDERATIONS:
University Hospital's Policy and Procedure for Fire Police and other emergencies is followed. The following policies relate to the MR environment:

When a call has been placed for a fire or police emergency in the MRI Center, MR technologists at all scanners should immediately stop scanning and remove patients from the scanner room.

The MR safety officer should be called and informed of the emergent situation so that they can be on site prior to the arrival of emergency personnel.

The MR safety officer and a designated MR staff member should monitor the scanner room doors to prevent free access by emergency personnel. (NOTE: Even in the event of a fire or other emergency the magnetic fields are likely to be present and fully operational.)

If the fire is in a location that fire fighters and their equipment (oxygen, canisters, crowbars, axes, defibrillators, ETC.) need to enter the scanner room, a decision to quench the magnet may become necessary to protect the health and lives of the emergency personnel.

In the case of a fire that is not in the scanner room, quenching the magnet should not become necessary.

If a quench is performed the MR safety officer and MR technologists need to ensure that all emergency personnel are restricted from the scanner room until the static magnetic field is no longer present.

**QUENCHING and other CRYOGEN RELATED ISSUES:**

In the event of a system quench it is imperative that all personnel/patients be evacuated from the MR scan room as quickly and as safely possible.

Stop all scanning and open the scan room door immediately. If the door to the scan room is closed the pressure may build up making it impossible to open the door. In this event, it may become necessary to break the glass window to allow the gases to escape and the pressure to be released so that the scan room door may be opened.

The access to the scan room should be immediately restricted to all individuals until
the arrival of the MR equipment service personnel. Do not rely upon the oxygen sensors in the room to warn of low oxygen levels in the room. This technology is now considered by industry experts not to be sufficiently reliable to allow for continued operations during situations of power outage, etc.

It is especially important to ensure that all police and fire response personnel are restricted from entering the MR scan room with their equipment (axes, air tanks, guns, etc.) until it can be confirmed that the magnetic field has been successfully dissipated, as there may still be considerable static magnetic field present despite a quench or partial quench of the magnet. MR Safety Officer and MR Medical Director need to be informed immediately.

VI. ATTACHMENTS:

None

VII. REASON FOR REVISION

Review

VIII. REFERENCES:

UHB Policy (RM-1) Incident Reporting
The Joint Commission Standards

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<th>Responsible Staff Name and Title</th>
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<td>Yes</td>
<td>James Shanahan, Director Radiology Department</td>
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<tr>
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<tr>
<td>1/2016</td>
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<td>Vincent Monte, Assoc. Director Radiology Department</td>
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