<b>Holland Blcorview</b>	Policy Title: Practice and Procedures MRI Emergency Procedures – Code Blue & White
Kids Rehabilitation Hospital	
	Date Created: Dec 19, 2019 Updated:

## **Objective:**

The MRI Emergency Code Blue and White policy is for all personnel to provide the appropriate response to medical and behavioural emergency situation in the MRI Unit.

### Introduction

The Magnetic Resonance (MR) environment presents unique hazards not commonly encountered by most personnel. Anyone entering the MR environment must be conscious of the strong magnetic field, radio frequencies and time varying gradient field. The most important point to remember is that the magnet is **always on**. Entry into the scan room (Zone IV) must only be authorized after successful screening process and completion of the screening form. All metallic objects and pocket contents must be removed.

During a code blue or white emergency in the in the MRI Unit, personnel are to follow designated protocol to ensure safety for all participants, family and personnel.

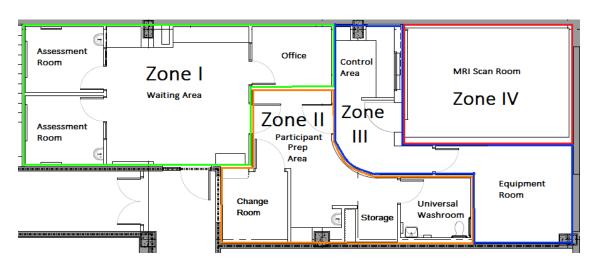
# **Definitions**

**Zone I**: Readily accessible areas by the general public outside MR environment (waiting room)

**Zone II**: Area between Zone I and Zone III where individuals are supervised by MR personnel (participant prep area)

**Zone III**: Restricted transition area between Zone II and Zone IV that is supervised and controlled by MR personnel (control room and restricted waiting area)

**Zone IV**: Area controlled and strictly supervised by Level Two MR personnel. This is a potentially hazardous area with presence of very strong magnetic fields. (MR Scan Room)



Version 1 Created Dec 19, 2019

<b>Holland Blcorview</b>	Policy Title: Practice and Procedures MRI Emergency Procedures – Code Blue & White
Kids Rehabilitation Hospital	
	Date Created: Dec 19, 2019 Updated:

**Level Two MR Personnel**: Individuals who work in MR environment and have extensive education on MR safety issues that is renewed on a yearly basis (i.e., MRI Technologist, MR Physicist)

**Level One MR Personnel**: Individuals who work in MR environment that have completed and passed minimum MR safety education (administered by a Senior MRI Technologist certified in MR safety) that is renewed on a yearly basis. (e.g., Clinical Coordinators, Research Assistants, Imaging Analyst)

**Authorized non-MR Personnel**: Staff that enter the MR environment occasionally and have completed and passed minimum MR safety education (administered by a Senior MRI Technologist certified in MR safety) that is renewed on a yearly basis. (e.g., building-services staff)

Access to MRI Unit: The personnel listed above will be provided with electronic and key access to MRI Unit. The MRI Technologist will also have key access to the MR scan room (Zone IV). For emergency access to the MR scan room, a key will be stored in a breakable glass case located in the MR control room

### **Code Blue – Resuscitation Event**

During a code blue, no resuscitation or life support equipment or the code blue team are allowed in the scan room. Code blue team may begin resuscitation in Zone II (participant prep area).

If participant is suspected to need medical attention during a scan procedure:

- MRI Technologist aborts scan and will enter the scan room to assess participant
- If participant needs medical attention requiring code blue, MRI Technologist or any staff in department available is to call 5555 or press Code Blue Button
- Level Two MR Personnel will remove participant from the scan room
- While participant is being removed from the scan room, Level One or Level Two MR personnel with BCLS certification will initiate life support while moving participant from scan room to Zone II
- Scan room door is to be secured by MRI technologist or MR personnel
- Access to Zone II assessment area is to be unlocked for Code Blue Team
- Urgent resuscitation kit containing AED and ambubag, located in Zone II participant prep area or by mill work in Zone I waiting area, is to be brought over by available personnel to assist in resuscitation until Code Blue team arrives
- Crash cart and oxygen supply located in basement (0 floor) will be brought to MRI Unit by Code
   Blue Team

<b>Holland Bloorview</b>	Policy Title: Practice and Procedures MRI Emergency Procedures – Code Blue & White
Kids Rehabilitation Hospital	
	Date Created: Dec 19, 2019 Updated:

 Code Blue team will provide medical assistance or administer resuscitation in Zone II (participant prep area) as per Holland Bloorview Kids Rehabilitation Hospital Code Blue policy

# **Code White**

During a code white, no equipment or the code white team are allowed in the scan room. Code white team may to assist staff for interacting with an actual or potential violent or out of control person in Zone II (participant prep area).

## **Code Blue and White Teams Orientation**

All Code Blue Team members will be required to take a tour of the MRI Unit to be introduced to the different zones, where they are to provide Code Blue response and understanding of hazards in the MR Unit.

#### References

ACR Guidance Document for Safe MR Practices: 2013. JOURNAL OF MAGNETIC RESONANCE IMAGING 37:501–530 (2013)

Shellock, F. G., Magnetic Resonance Pocedures: Health Effects and Safety, Pre-Magnetic Resonance Procedure Screening, 2009

Holland Bloorview Kids Rehabilitation Hospital. 2019. HB Connect Policies and Procedures Emergency Codes Blue: Medical Emergency, <a href="http://policy/Emergency%20Preparedness/Code%20Blue.pdf">http://policy/Emergency%20Preparedness/Code%20Blue.pdf</a>