

Penn State

SLEIC 3T MRI Investigator Refresher Safety Quiz

Name **Date Score PSU email**_____ **ex: (ase1@psu.edu)**

Lab group or SLEIC Project ID: (e.g., sjw42_sema, ase1_pilt):_____

You must pass the safety quiz to work in the control room or the scanner room. There are 10 questions. You may miss 3 and still pass. You may ask for clarification and retake the test.

1. The magnet is turned off
 - o a. At the end of the work day
 - o a. Between participants
 - o a. On weekends
 - o a. Never
2. Which of the following conditions should prevent a person from entering the scanner room?
 - o a. Pregnancy
 - o a. Hip replacement
 - o a. Surgical clips
 - o a. Cardiac pacemaker
3. Small ferrous objects in your pocket are
 - o a. a danger only during a scan
 - o a. at risk of becoming projectiles as you approach the magnet
 - o a. shielded from the magnetic field
 - o a. are not a problem because they are in your pocket
4. The strength of the magnetic field
 - o a. is only important when the magnet is scanning
 - o a. increases with little warning as you approach the magnet
 - o a. repels most large metallic objects
 - o a. is only important when dealing with nonferrous objects
5. The term “quench” as used in an MRI setting describes
 - o a. the thirst a participant experiences from a contrast injection
 - o a. a daily procedure used to tune the RF settings
 - o a. a failure of the helium containment system

- a. a procedure that happens at the end of the day
6. When would you need to push the quench button?
- a. There is a fire in the scanner
 - a. An OPP employee walked into the room with a tool belt and a hammer flew into the magnet and is stuck
 - a. A floor buffer was taken into the room and has pinned someone to the magnet
 - a. All of the above
7. Who needs to be screened before entering the scanner room?
- a. The participant
 - a. The researcher
 - a. The MRI technologist
 - a. All individuals must be screened prior to entering the scanner room
8. A bobby pin flies into the magnet. No one was injured, and the MRI technologist removed the bobby pin. You would
- a. Report this to the SLEIC Director and MRI Safety Officer
 - a. Since there were no injuries there is no need to report this
 - a. Assume the MRI technologist will report this to the MRI Safety Officer
9. Two OPP personnel have entered the control room with all of their tools. You would
- a. assume they must be safety trained if they are in the control room, so it must be fine
 - a. ask them if they are here to work on the magnet and let them in the scanner room
 - a. ask them to wait in the waiting area until you find a SLEIC staff member to handle the situation
 - a. The 3T door is closed so there is no danger
10. Which of the following objects could become projectiles in the scanner room?
- a. Hair pins
 - a. Scissors
 - a. Pens
 - a. Oxygen tanks
 - a. All of the above