

## MRI Safety Training - Milton Imaging

Subject	Topics to Include
<b><i>Business Purpose</i></b>	<p>Milton Imaging serves patients seeking specialty diagnostic services (i.e. MRI scans).</p> <p>Milton Imaging anticipates MRI will be the most utilized service at their new facility, scheduled to open in August 2024.</p>
<b><i>Target Audience</i></b>	<p>Clinic employees, including MRI technicians and general staff members</p>
<b><i>Training Time</i></b>	<p>15 minutes</p>
<b><i>Training Recommendation</i></b>	<p>1 self-paced eLearning course in Articulate Storyline</p> <p>Job aids</p>
<b><i>Deliverables</i></b>	<p>Self-paced eLearning course</p> <p>Job aid (list w/ photos of hazardous items)</p> <p>Job aid (map of MRI suite indicating danger zones)</p>
<b><i>Learning Objectives</i></b>	<ol style="list-style-type: none"><li>1. Explain the hazards of MRI exposure when metal is present.</li><li>2. Identify common items that patients may bring or wear during MRI testing.</li><li>3. Practice pre-screening patient interviews.</li><li>4. Identify safety risks and highlight protocols for each zone of the MRI suite using visuals and warnings.</li></ol>

## Training Outline

- I. Introduction**
  - A. Welcome participants
  - B. Share training goals
- II. What is MRI imaging / What is an MRI machine?**
  - A. Describe the test it creates
  - B. Describe how the machine works
  - C. Visual: Display image of an MRI machine
- III. What are the hazards of MRI exposure to the human body when metal is present?**
  - A. Explanation of the strength of the magnet's pull
  - B. Explanation of the dangers metal items present if brought into the MRI suite
    1. Describe Radio Frequency Field Risk and how it may harm patients
    2. Explain Cryogen Risk should the magnetic field shut down unexpectedly
  - C. Interaction: Utilize map of Zone IV room (w/ MRI machine) containing items that must be checked for safety via hotspot flagged as hazardous (fire extinguisher, bobby pin, pen, etc.)
- IV. Identify common items patients may bring into/wear to testing**
  - A. List items like hairpins, watches, piercings, belts, buttons, etc. (insert pockets diagram and human body diagram)
  - B. Interaction: Use a diagram of the human body with hotspots or click-to-reveal interactions showing common medical devices and their location (i.e. pacemaker, insulin pump, metal clamps, etc.)
  - C. Interaction: Use a tabs interaction to show a variety of metals found in clothing, health and beauty aids, accessories, etc.
- V. Distinguish the safety risks present within each zone (Zone I-IV) of the MRI suite**
  - A.
  - B. Interaction: Using a map of the suite with pulsing markers, explain how the zones function and the risks associated with each zone
  - C. Interaction: Using a zone map with hotspots, (w/ MRI machine) include items that should be investigated and flagged as hazardous (fire extinguisher, bobby pin, pen, etc.)
- VI. Practice asking patients questions about metal on or in their persons (clothing, health and beauty aids, medical devices, or other personal items)**
  - A. Interaction: Use a dialogue sequence between employees and patients to prepare patients for screening
- VII. Draw attention to Zone I-IV safety protocols using visuals and/or warnings to elicit behavior change in patients and staff**
  - A. Interaction: Use a decision-based scenario for Milton employees who usually do not work in the MRI suite.

	<p>Decisions either bring users closer to danger or rewarded safe choices</p> <p>B. Use a branching scenario between a patient and an employee for pre-screening preparation. Outcomes change based on decisions and protocols being followed or not followed</p> <p><b>/III. Conclusion</b></p>
<b><i>Evaluation Plan</i></b>	<p>Scenario-based testing</p> <p>Click rates</p> <p>Employee/trainee safety observation</p>