

Hearing Protection



Safety Measures for Radiologic Technologists in the MR Environment

- **Wear Hearing Protection:** All individuals in Zone 4 during active scanning must wear one or more forms of hearing protection.
- **Choose the Right Gear:** Use MR-safe hearing protection for comfort and to reduce noise below 99 dB(A).
- **Ensure Proper Fit:** Follow the manufacturer's instructions for wearing hearing protection devices.
- **Inform Patients:** Explain MR noise levels and the importance of hearing protection.
- **Know the Risks:** Train staff on safe practices in high-noise environments and the importance of hearing protection.



Key Facts

- **MR Equipment Noise Levels:** Can reach 130 dB — as loud as a jet engine.¹
- **Safe Listening Levels:** ≤ 80 dB for adults, ≤ 75 dB for children.²
- **Protected Hearing:** Effective hearing protection can reduce active scanning noise by up to 28-30 dB(A).¹
- **Unprotected Hearing:** Hearing damage can start at 85 dB. Noise levels >120 dB can cause immediate hearing loss.³



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To view data references, visit asrt.org/hearing-protection-references.