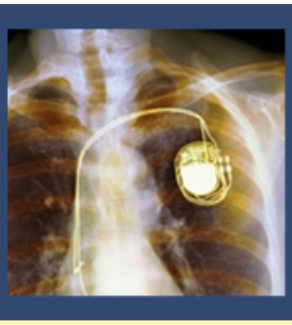
INTERNATIONAL SOCIETY FOR MR
ISMRT
RADIOGRAPHERS & TECHNOLOGISTS
A Section of the ISMRM

A WORLD OF KNOWLEDGE FOR MAGNETIC RESONANCE PROFESSIONALS

Visit the ISMRT MR Safety Website for real-time resources & information!
www.ismrm.org/mr-safety-links



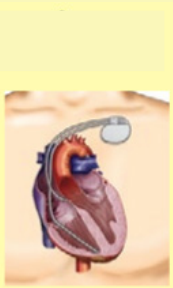
ISMRT **MRI Safety**

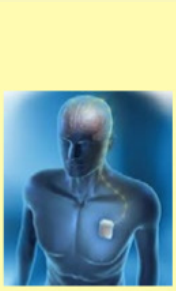
Active Implanted Biomedical Devices

Does your patient have an implanted device that is electronic, programmable, or provides active therapy?

Need to obtain the following information:

- Manufacturer name
- Model name and/or number
- Serial number





Does the active implanted device have MRI safety information?

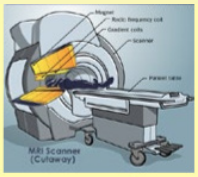
- "MR Conditional"
- "MR Unsafe"
- Not tested or labeled for MRI
- FDA warning

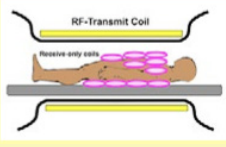
Risk-versus-benefit decision is conducted by the MR physician

- Does the device require special programming or monitoring?
- Any scanning limitations?
- Are there exclusion zones?
- Do you have the personnel and necessary equipment to meet the "MR Conditional" labeling requirements of the device?

Device labeling "MR conditions" necessary to fulfill can include:

- Field strength (B_0)
- Maximum spatial gradient level (B_0)
- RF coil (transmit-receive coil or whole-body transmit boil)
- SAR and/or B1+rms levels
- Time-varying gradient magnetic fields (dB/dt or slew rate)
- Length of each MRI acquisition/scan





Is your MRI suite equipped and ready to handle adverse events?

- Overriding safety warnings can result in injuries and potentially life-threatening events.