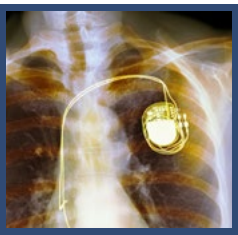
SMRT
SOCIETY FOR MR RADIOGRAPHERS & TECHNOLOGISTS
A Section of the ISMRM

A WORLD OF KNOWLEDGE FOR MAGNETIC RESONANCE PROFESSIONALS

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

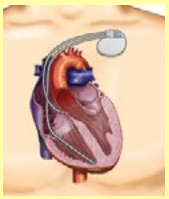


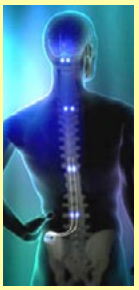
SMRT MRI Safety

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**

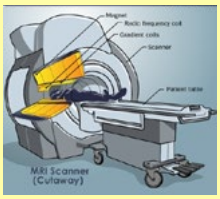
Override FDA warning?

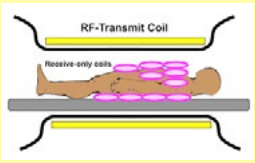
Risk versus Benefit decision is conducted by the MR Physician

- **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 coil)**
- **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**