

# **Electronic Medical Devices and Medical or Cosmetic Metallic Implants**

#### **Active electronic medical devices:**

Elevated RF Fields found on Broadcast Sites may cause interference with the functions of electronic medical devices. It is important to identify these prior to working in RF Field environments so that an assessment can be made to ensure that you are not put at risk. Electronic medical devices include any electronic device which may be affected by radio interference (i.e. cardiac pacemakers, implantable defibrillators, and Cochlear implants).

### **Passive metallic implants:**

Certain metallic implants may re-distribute incident RF energy and cause heating around parts of the implant. It is therefore important that these are identified before working with RF so that an assessment can be made to ensure you are not put at risk. Metallic implants include surgically implanted items such as orthopaedic plates, screws, wires, rods, and shrapnel.

# Types of Implants or items not requiring assessment:

- Implant less than 20mm as its largest dimension
- Items located inside the mouth i.e., tooth fillings, caps, orthodontic braces, and plates
- Round or wide plate less than 50mm in diameter
- Closed loops or wire loops with ties
- Arterial stents
- Jewellery worn or body piercings
- Spectacles

## **Pregnancy:**

Staff or visitors that become aware of or the possibility of pregnancy, must inform their manager/supervisor and are not permitted to access areas that exceed the General Public reference limits as defined in the ARPANSA RPS S-1 (REV. 1): Standard for Limiting exposure to Radiofrequency Fields 3 kHz to 300 GHz