

# Radiation Therapy for Patients with an Implanted Electronic Device

*What patients need to know*

## What is an implanted medical electronic device?

An **implanted electronic device** is an object that is placed inside your body, runs on electrical energy, and helps maintain your health. Because it is an implanted device, there are parts that cannot be removed from your body during radiation therapy.

## What happens to my implanted medical electronic device during radiation therapy?

Radiation can sometimes interfere with the function of these devices, but this is rare and usually temporary. The risk depends on the type and location of your device, the amount and direction of radiation, and other factors. Your radiation oncology team will work together to plan your treatment in a way that reduces the risk to you and your device, and work with you to coordinate appropriate monitoring during your course of treatment.

Some common examples of implanted medical devices are listed below. If you wear other types of implanted medical electronic devices that are not mentioned in this pamphlet, please let your Care Team know.

## **Pacemakers and defibrillators**

If you have a cardiac device, such as a pacemaker or defibrillator, you will need to have your device checked by a cardiac device specialist before you start, and after you complete your course of treatment. These checks will be coordinated by the RVH team. They will check the device's battery life, settings, and function. If there are any additional risks or precautions for your specific situation, your radiation oncologist will discuss them with you before starting treatment.

## **Assistive or monitoring devices**

If you wear an implanted assistive device, such as a cochlear implant or an implanted monitoring device, such as an implanted glucose sensor, you may be asked to remove external electrical components before your treatment and have an alternate testing method available. If you are unable to remove it, please speak to your care team.

## **Summary**

Radiation treatment is generally safe for patients with implanted electronic devices when proper planning and monitoring are done.