

Safety Information for Cochlear Implant Recipients and their Carers

Your cochlear implant device is designed to be safe and effective. It consists of both internal and external components. The implant is the internal surgically implanted part, and the sound processor is the externally worn equipment. Most cochlear implant recipients can lead a normal life but it is important that you follow the manufacturer's safety instructions.

Manufacturers are responsible for providing safety information for all their products. Device specific safety information is available from each of the manufacturers. You will be provided with a user guide for your particular device. This contains product information and essential safety information. It will inform you of any precautions or warnings or special instructions that you need to follow. It is crucial that you adhere to this advice to prevent harm to you and to avoid damage to your implant / sound processor.

The following information is for devices manufactured by **MED-EL**.

Information is available on the website at:

<https://www.medel.com/important-safety-information>

MED-EL can be contacted at:

Telephone: 0330 123 5601

Email: clinicalsupport@medel.co.uk

(Full contact details can be found at: <http://www.medel.com/uk/info/>)

BCIG has compiled a list of frequently asked questions (FAQs) and have asked **MED-EL** to provide device specific responses to these questions.

Cochlear Implant Safety – Frequently Asked Questions

General Questions

Question	Answer
What should I do if I develop an ear infection?	Contact your Implant Centre and follow their advice.
What should I do if I experience pain, swelling, redness or soreness in the region of my implant?	Contact your Implant Centre and follow their advice.
What should I do if I bump my head in the region of the cochlear implant?	Contact your Implant Centre and follow their advice.
Can you provide cremation advice?	The internal device does not require to be removed prior to cremation.

Medical and Dental Diagnostic X-Rays and Scans

Before having any type of x-ray or scan, please inform the Radiographer / Radiologist that you have a cochlear implant. You may be required to follow special instructions such as removing your sound processor to allow the scan to be carried out. [MED-EL](#) has provided the following advice:

Question	Answer
Can I have a diagnostic x-ray of any part of my body?	
Can I have other procedures involving x-rays e.g. dental OPT, mammogram, bone densitometry, CT scan?	
Can I have a diagnostic ultrasound scan?	
Can I have a Doppler ultrasound scan or echocardiogram?	
Can I have Nuclear Medicine scans involving radionuclides e.g. bone scans, PET, SPECT scans?	
Can I have an MRI Scan?	
Are there any other types of scans that could be harmful to me or my implant or require special precautions?	

Medical / Dental Treatments, Therapy and Surgical Procedures

Before having any medical or dental treatment, therapy or surgical procedure, please inform your Doctor, Dentist, Nurse or Therapist that you have a cochlear implant and if you have any other medical devices. Some surgical procedures and treatments that use electrical current, heat, vibration and radiation (especially in the region of the head, neck and shoulders) may be harmful to you and/or your implant. [MED-EL](#) has provided the following advice:

Question	Answer
Can I undergo a course of Radiotherapy and are there any special instructions that I need to follow.	
Warnings about Electrosurgical Instruments and Diathermy	
Warnings about Electromagnetic Radiation	
Warnings about Therapeutic Ultrasound, Microwaves and Diathermy	
Warnings about Neurostimulation	
Warnings about Electroconvulsive Therapy	
Are there any other medical, surgical or therapeutic treatments that could be harmful to me or my implant or require special precautions?	

Sports, Beauty and Leisure

Your cochlear implant (the inside part) is vulnerable to damage from significant bumps or falls and pressure. The implant can break or become dislodged from its original position. Surgery may be required to (re-)move the implant and replacement may or may not be possible. Cochlear implant recipients should not participate in activities where there is a high risk of head injury or sustained pressure to the implant site. For some activities head protection may be recommended and for others it may be advisable to remove the external equipment (sound processor and/or accessories). [MED-EL](#) has provided the following advice:

Question	Answer
Are there any sports or activities that are not permitted?	
Are there any sports or activities where head	

protection is recommended?	
Can you provide advice on what type of head protection is required?	
Can I use electronic equipment for electrolysis, tattoos, pain relief, muscle toners, gym equipment etc?	
Can I use hair clippers, electrical razor, hair dryers, curling tongs, hair straighteners, head lice comb etc. in the region of my implant?	
Can I have procedures carried out that use sources of light (e.g. sun beds) or laser for hair removal, tattoo removal etc.?	
Warnings about Fairground Rides and Amusement Parks	
Warnings about Extreme Thrill Rides and other activities with High G Forces	
Warnings about Swimming, Snorkelling, Shallow Diving, Canoeing and Sailing	
Warnings about Scuba Diving	
Are there any other sports, recreational activities or cosmetic procedures that could be harmful to me or my implant or require special precautions?	

At Home, Education and in the Workplace

You are very unlikely to come across any equipment in your home that has the potential to interact or cause damage to your implant. However, warnings are in place for those working with high powered electrical equipment and electromagnetic radiation in the workplace or in places of education. [MED-EL](#) has provided the following advice:

Question	Answer
Should I be concerned about static electricity at home, in the car, in the office, children's play equipment (ball pools etc.) and are any precautions required?	
Is there any standard household equipment that has potential to interact with my implant, processor or accessories and are any	

precautions required? e.g. induction hobs.	
Is there any equipment at school, college or university (e.g. in science, technical subjects or home crafts) that has potential to interfere or interact with my implant, processor or accessories and are any precautions required? e.g. Van der Graaf generators.	
Is there any equipment in the workplace that has potential to interact with my implant , processor or accessories and are any precautions required?	
Warnings about high-voltage equipment, radar, high tension wires, smelting furnaces etc.	
Warnings about electro-magnetic radiation.	
Are there any other signals or systems that could be harmful to me or my implant or require special precautions?	
Can you provide advice for those who are required to wear a Hard Hat in the work place?	

Interactions and Interference

In everyday life it is very rare for other equipment to interact or interfere with your sound processor or wireless technology. If this happens you may experience intermittent or distorted sound. It will not damage your processor and the effect is only temporary. It will go away when you move away from the source of interference. Do not remain close to the source of interference for any longer than necessary (or switch-off your processor in advance). It is equally unlikely that your cochlear implant, sound processor or wireless technology will affect the functionality of nearby electrical equipment. If this happens, move away from the affected electronic device. You may be asked to switch-off your processor or wireless technology in restricted areas where radio frequency transmission is prohibited. [MED-EL](#) has provided the following advice:

Question	Answer
Are there any known sources of interference that may interact with my cochlear implant and accessories and are there any	

precautions that I should follow?	
Do my cochlear implant or accessories have the potential to interact or cause interference in other electrical equipment nearby and are there any precautions that I should follow?	
Can my cochlear implant and accessories interact with any other medical devices that I have? e.g. cardiac pacemaker or any electro-medical equipment that I rely upon e.g. insulin pumps, dialysis equipment etc.	
Can my cochlear implant and accessories interact with medical devices in use by others in close proximity e.g. can a young CI user feed/sleep on the chest of an adult pacemaker user?	
Are there any situations where I should switch-off my processor or wireless technology e.g. going through airport security, on planes during take-off and landing, in hospital intensive care units?	

This document was prepared in November 2017 and is due for review in November 2019.

If you have any further questions regarding safety, please do not contact BCIG. Please contact your cochlear implant centre in the first instance.