

## Listening through a cochlear implant easy read



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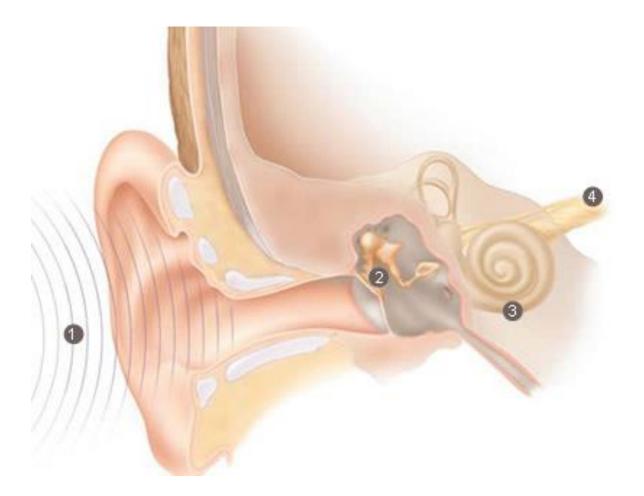
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E-mail: <u>nicola.george@wales.nhs.uk</u> <u>tracy.hughes6@wales.nhs.uk</u> <u>heidi.williams@wales.nhs.uk</u> Cochlear implants are offered when conventional hearing aids provide little or no benefit to people with a severe or profound hearing loss.

It is a different way of hearing and takes time to get used to.

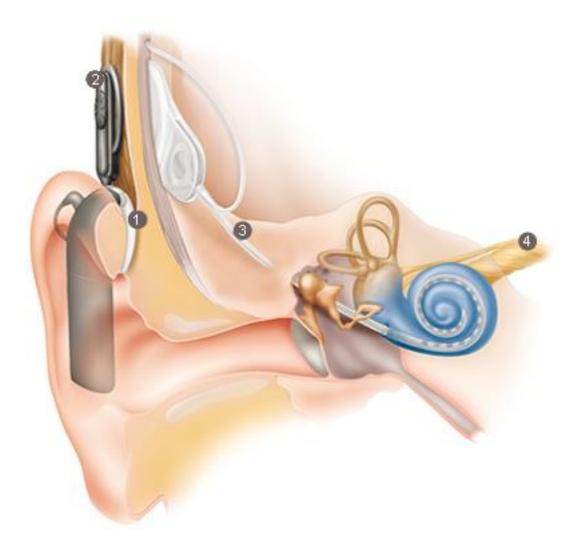


 Sounds enter our ear via our ear canal and reach the ear drum. The vibrations are sent through the eardrum to the 'ossicles' (3 little bones) 2. ...these ossicles vibrate and send the sound waves to the round window.

3. The cochlea, which is filled with fluid has millions of hair cells inside. Once sound waves are sent to the cochlea they change into electrical impulses which is then sent......

4. along the nerve to the brain. The brain works out what the sound is.

Ordinary hearing aids make sounds louder, but a cochlear implant doesn't use the first parts of the ear, it goes straight to the cochlea.



1. The processor hears the sounds through the microphones and changes them into radio waves.

2. The radio waves go to the coil and through the skin to a receiver coil. The two coils stick together with magnets.

3. The radio waves are turned into electric information so they can go down the wire in the cochlear and....

4. ...straight to the brain to be heard as sounds.