

COVID-19 and Cleaning your Cochlear™ Productsⁱ - Information for Clinicians, Recipients and Carers

The World Health Organization (WHO) has issued guidance on the most important protective measures that the public can take to protect themselves and others from getting COVID-19. This includes good hygiene and is available here:

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>

During the coronavirus (COVID-19) pandemic we have received several questions from recipients and carers about how they can clean their Cochlear™ Products considering the public attention on better hygiene. To help answer any questions you have, please refer to the below FAQs. If your question is not answered by the below FAQs, please contact your local Cochlear representative.

This guideline can be applied to the use of Cochlear products as follows:

- The use of Cochlear products at school to improve safe handling of the products by several people.
- The use of Cochlear products for demo or trial, from patient-to-patient.
- Other scenarios where users require other people to handle product, e.g., teachers, lecturers or healthcare workers.

How should I clean my Cochlear product?

The User Guide for your Cochlear products typically refers to “Everyday Cleaning” and “Regular Care” – these are typical maintenance steps to take care of a sound processor or accessory every day. Please refer to your relevant user guide for these instructions.

In normal circumstances, Cochlear would not recommend extra cleaning, as this increases the risk of cosmetic damage to the sound processor or damage to the microphone(s) if done incorrectly.

Disinfecting is not needed for normal care and maintenance of any Cochlear sound processor or accessory.

We have not tested the long-term use of cleaning fluids.

However, if, during this pandemic, you feel your product may have been contaminated, and you would like to clean it with a disinfectant, then we have set out some options for you in the sections below.

It is important to note that the WHO recommends that you regularly and thoroughly clean your hands with an alcohol-based hand rub or wash them with soap and water, which kills viruses that may be on your hands. This helps to ensure your hands are clean when handling your Cochlear products.

We recommend that people thoroughly clean their hands prior to handling a sound processor or any of its accessory items.

I believe my sound processor may be contaminated with COVID-19, how can I clean it?

In case you feel your processor has been contaminated and would like to clean it, the United States Environmental Protection Agency (EPA) has published a list of possible disinfectants that can be used against coronavirusⁱⁱ. The instructions below are based on the EPA list and are provided as a guide only.

Guidance on using cleaning fluids is not included in the user guides.

Equipment you'll need:

- **Cleaning fluid or pre-moistened wipe:** Hydrogen Peroxide* (3% solution for household use) OR Alcohol cleaner (60-70% solution ethanol OR isopropanol**).
 - *If you have a Nucleus® Kanso® Sound Processor (CP950) or Osia® 2 Sound Processor, we recommend using hydrogen peroxide rather than alcohol cleaner, as the casing is more sensitive to alcohol if used incorrectly.
 - **If you have a Cochlear Baha® Sound Processorⁱⁱⁱ the alcohol cleaner must be made of 60-70% isopropanol. DO NOT USE ethanol as it may damage the processor.
 - [Tables 1 & 2](#) include a summary on how to identify your Cochlear product and which cleaning fluid(s) would be most suitable if following this guide.
- **Cleaning implements:** Wipe, soft cloth(s), cotton buds/cotton swabs or pad – to apply cleaning fluid. Clean toothbrush or soft brush – for use on the connector.
- **Drying cloth:** Soft dry cloth – to dry the device and remove any residual cleaning fluid.

CAUTION:

- Always read the instructions for use of a cleaning fluid. Keep out of reach of children. Check the percentage or concentration of the solution active ingredient and prepare any solution as per the manufacturer's instructions.
- If you notice any discolouration while cleaning, dry the sound processor thoroughly straight away and stop using that cleaning fluid.
- Sound processor microphone performance can be degraded by excessive exposure to cleaning fluid.
- Do not clean over the microphones.
- Do not submerge or saturate sound processors, True Wireless™ accessories or remote controls^{iv} with any fluid.
- Clean your hands before and after cleaning or use clean disposable gloves. Work on a clean surface.

Cleaning instructions:

1. Do not expose to heat, direct sunlight or lamps during the cleaning process. This is so that the cleaning fluid does not evaporate too quickly and has enough time to clean the sound processor.
2. Moisten a cloth or cotton bud with cleaning fluid or use the pre-moistened wipe. Do not spray cleaning fluid directly on your sound processor or submerge or saturate sound processors with any fluid.
3. Paying attention to avoid the microphones, carefully wipe all surfaces of the sound processor with the cloth, cotton bud or wipe continuously for the below times. Ensure no fluid enters the openings when wiping near sound processor microphones.
 - 1 – 2 minutes for Hydrogen Peroxide (3%).
 - 20 – 30 seconds for alcohol cleaner (60 – 70%).
4. Thoroughly wipe dry the sound processor with a dry cloth to remove any residual cleaning fluid.
5. Clean any connectors with a clean toothbrush or other soft brush and then a cotton swab moistened (not saturated) with the cleaning fluid.
6. Once completely dry, the cleaning process is completed.

Why do you not recommend alcohol cleaning fluid for the Nucleus Kanso Sound Processor / Osia 2 Sound Processor?

Repeated use of alcohol / wipes containing alcohol could lead to degraded external materials. If these degraded materials have prolonged exposure to skin, this could lead to irritation and/or injury.

If alcohol wipes are used multiple times or if alcohol is left on the surface of the device and it is exposed to heat, this could lead to discolouration or cracks forming in the protective casing.

If you notice any discolouration while cleaning, dry the device thoroughly straight away and stop using that cleaning fluid.

It is fine to use alcohol cleaner (as directed above) for behind-the-ear (BTE) Cochlear Nucleus Sound Processors, or Cochlear Baha Sound Processors.^v

Where can I find my user guide?

User guides are provided with your product kit or available from your local Cochlear website or representative. Guidance on using cleaning fluids is not included in the user guides.

The Cochlear product I am looking for is not included below?

We hope to provide instructions for other products soon.

In normal circumstances, Cochlear would not recommend extra cleaning. We have not tested the long-term use of cleaning fluids. In order to provide these instructions, we are reviewing potential cleaning fluids based on the materials that our products are made of.

Table 1.

The below table includes details on how to identify your sound processor and which cleaning fluid(s) would be most suitable if following the instructions above.










Hearing Implant & Sound Processor Type	Sound Processor	Image	Most suitable cleaning fluid
Cochlear implant behind-the-ear (BTE) sound processor	Nucleus 7 Sound Processor (CP1000)		Hydrogen Peroxide (3% solution for household use) OR Alcohol cleaner (60-70% ethanol OR isopropanol solution)
	Nucleus 6 Sound Processor (CP900)		
	Nucleus 5 Sound Processor (CP800)		
Cochlear implant over-the-ear (OTE) sound processor	Nucleus Kanso Sound Processor (CP950)		Hydrogen Peroxide (3% solution for household use)
Active bone conduction	Osia 2 Sound Processor		
Bone conduction	Baha 5 Sound Processor		Hydrogen Peroxide (3% solution for household use) OR Alcohol cleaner (60-70% isopropanol solution)
	Baha 5 Power Sound Processor		
	Baha 5 SuperPower Sound Processor		
	Baha 4 Sound Processor		

Table 2a.

The below table includes details on how to identify your Cochlear accessory and which cleaning fluid(s) would be most suitable if following the instructions above.

Cochlear product	Image	Most suitable cleaning fluid
Cochlear Wireless Mini Microphone 2		<p>Hydrogen Peroxide (3% solution for household use) OR Alcohol cleaner (60-70% ethanol OR isopropanol solution)</p>
Cochlear Wireless Mini Microphone 2+		
Cochlear Wireless TV Streamer		
Cochlear Wireless Phone Clip		
Cochlear Baha Remote Control 2		

Table 2b.








Cochlear product	Image	Most suitable cleaning fluid
Headband		<p>Hydrogen Peroxide (3% solution for household use) OR Alcohol cleaner (60-70% ethanol OR isopropanol solution)</p> <p>*These products can be saturated with solution to ensure thorough cleaning is achieved.</p>
Testband		
Test rod		
Baha SoundArc		
Osia 2 Aqua+		
Osia Demo Implant		
Baha Attract Sound Processor Magnet		

Table 2c.

The below table includes a Cochlear accessory that can be cleaned with soap and water and does not require use of cleaning fluids.

Cochlear product	Image	Most suitable cleaning fluid
Cochlear Baha Softband		<p>Follow regular washing instructions: The Baha Softband can be washed by hand at 40 °C (104 °F) or cooler. Use a mild soap but avoid fabric softeners. Do not tumble dry or iron. The disc(s) can be cleaned with a small brush. Avoid strong chemical solutions.</p>

Footnotes

ⁱ Applicable to Cochlear™ Nucleus® 5 Sound Processor (CP800), Cochlear™ Nucleus® 6 Sound Processor (CP900), Cochlear™ Nucleus® 7 Sound Processor (CP1000), Cochlear™ Nucleus® Kanso® Sound Processor (CP950). Cochlear™ Baha® BP100 Sound Processor, Cochlear™ Baha® BP110 Power Sound Processor, Cochlear™ Baha® 4 Sound Processor, Cochlear™ Baha® 5 Sound Processor, Cochlear™ Baha® 5 Power Sound Processor, Cochlear™ Baha® 5 SuperPower Sound Processor, and the Cochlear™ Osia® 2 Sound Processor.

ⁱⁱ This is based on the United States Environmental Protection Agency (EPA) List N: Disinfectants for Use Against SARS-CoV-2. Available at <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2> [last accessed March 23, 2020]. This list includes household/trade names of products available in the United States. Availability / product names in other countries may vary.

ⁱⁱⁱ Cochlear™ Baha® BP100 Sound Processor, Cochlear™ Baha® BP110 Power Sound Processor, Cochlear™ Baha® 4 Sound Processor, Cochlear™ Baha® 5 Sound Processor, Cochlear™ Baha® 5 Power Sound Processor and Cochlear™ Baha® 5 SuperPower Sound Processor.

^{iv} For Cochlear Nucleus Sound Processors where applicable, this may include the Processing Unit, Battery Module (rechargeable or disposable), Coil and Coil Cable. For other Cochlear products where applicable, this may include the charging cables and charging adaptors.

^v Applicable to Cochlear™ Nucleus® 5 Sound Processor (CP800), Cochlear™ Nucleus® 6 Sound Processor (CP900), Cochlear™ Nucleus® 7 Sound Processor (CP1000), Cochlear™ Baha® BP100 Sound Processor, Cochlear™ Baha® BP110 Power Sound Processor, Cochlear™ Baha® 4 Sound Processor, Cochlear™ Baha® 5 Sound Processor, Cochlear™ Baha® 5 Power Sound Processor and Cochlear™ Baha® 5 SuperPower Sound Processor.

Please seek advice from your health professional about treatments for hearing loss. Outcomes may vary, and your health professional will advise you about the factors which could affect your outcome. Always read the instructions for use. Not all products are available in all countries. Please contact your local Cochlear representative for product information.

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