

ReSound


For people with Cochlear Implants

Winter 2022

Issue 72



The Barrel Inn at Bretton near Hope

Manchester
Cicada  a charity supporting implant patients

This newsletter has been produced on behalf of the Manchester CICADA Charity

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Editorial

Welcome to the Winter edition of Resound and the first for 2022.

Can I take the opportunity of wishing everyone a happy and successful year and look forward to a resumption of our meet-ups.

As we work our way through the various stages of the pandemic we will be looking to start meeting up again, observing whatever the current rules are and a provisional list of ideas will be sent out to everyone soon.

We continue to work closely with the Implant team at the Manchester Royal Infirmary especially by providing help to new and prospective users of CI's when requested by the team. On that subject a big shout out to Dal O'Mera for all her help recently with a new CI user in her area.

We featured our Lip reading team of Barbara and Alison in the last issue and have a message from Barbara in this issue. If you want more information on classes in

your area then do get in touch.

For those of you on Facebook don't forget CICADA has its own site and we would love to hear about your good times as well as any trials and tribulations you may want to share. For those who don't have Facebook we have our website:

www.manchestercicada.org.uk

I recommend a browse :)

Once again, if you have a story to tell about your journey with the implant program or an everyday occurrence we would love to hear from you, this magazine after all is about you.

We hope you enjoy this issue and if you've any comments, or stories to send along please let me know.

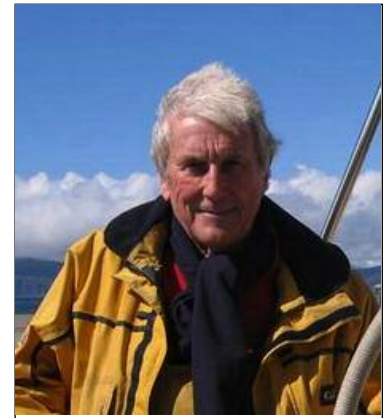
Kevin Williams - Editor

A SHORT BUT CHEERFUL STORY

by John Newton



People with hearing loss are often found making justifiable complaints about the general insensitivity to the problems which their deafness creates for them especially in communication. I am pleased to describe a recent encounter with the AA breakdown organisation which went very smoothly.



I cannot make voice calls so when my windscreen wipers packed up on a drear rainy day over the Christmas somewhere in the wilds of north Birmingham I sent a plea for help via SMS text to the number I had written in my diary (see note below) without much confidence of a prompt response.

On other occasions when I have tried to text other breakdown outfits, I have had a lot of trouble getting any response at all.

Those encounters have sometimes given the impression that my respondent didn't understand messaging or didn't speak English, a weird feeling where you wonder whether you are in the same universe as the person you are trying to talk to. I am sorry to say I have had similar responses from the NHS and been told "we don't do text"!

However it seems that the AA at least have got it together.

My text produced an immediate response which asked "are you in a safe place?" After explaining the problem they promised to get help within the hour.

I was in an area I didn't know very well so they sent me a link to pinpoint my location. They also gave me a tracker link which kept me updated about the estimated arrival time although, in fact the patrolman, a cheerful Brummie turned up earlier than the estimate.

While he was affecting a temporary repair to get me the 70 odd miles home, I learned that he had worked in Longbridge for what was then the BMC, the British Motor Corporation and had spent time on the production line for my car!

*Ed: I didn't know they did windscreen wipers for these cars
John ;)*



Message from our Patron

Professor Richard Ramsden, MBE

It seems a long time since we carried the first cochlear implants in Manchester - 33 years in fact, and the operation is now happily commonplace, with the lives of many thousands of deaf or deafened adults and children transformed.



The programme in Manchester owed much to the fund raising efforts of the HEAR charity and one of our aspirations was the establishment of a club or association where people with implants could exchange views and experiences, as well as enjoy the company of each other socially. Hence CICADA, so called after the Australian club of the same name which in turn, recalled the sound described by one of the very first implant patients when his single channel device was switched on.

I am very happy that CICADA in Manchester has survived and grown and I have kept a close eye on things thanks to ReSound and by contact with Kevin, who has done a marvellous job in running the association with such enviable enthusiasm. I enjoy reading your personal experiences and keep up to date with the science with Kevin's regular resume of the literature.

COVID has presented difficulties for any organisation for which social gatherings are an essential element, and good though ZOOM is, it is not the same as meeting up with friends for a meal and a drink and a bit of

chit chat.

CICADA continues to have an important role working together with the implant teams to deal with day to day issues, answer queries and provide information. This could be in-person, or at

distance using Zoom or Facetime, and it might be possible to have a number of "old lags" in different parts of the region who could provide this service in person to newly implanted patients in their vicinity.

This could be important in maintaining the integrity of the association, which I suppose COVID could be in danger of undermining. I am however optimistic about the eventual outcome in the battle against the virus and am sure that things will return, if not to the old normal, but to a new normal when the social side of life can be manageable.

I left Manchester 7 years ago and am spending my declining years in Oxfordshire where the rain is warmer and the family are nearby.

My involvement with deafness now takes the form of being a trustee of "Hearing Dogs for Deaf People" which is based near my home.

I am very happy with what we achieved in Manchester and am particularly pleased that CICADA has gone from strength to strength. Long may it continue.

The Cochlear Implant as a Sensor

The cochlear implant (CI) is the most successful neural prosthesis worldwide. Thanks to direct stimulation of the auditory nerve, it enables more than half a million people worldwide to hear, even though those affected were born deaf or deafened. Researchers have developed a method to convert the stimulation electrodes of common CIs into electrochemical sensors. With the help of this novel sensor function, the functionality of cochlear implants could be monitored directly in the inner ear in the long term.

The cochlear implant (CI) is the most successful neural prosthesis worldwide. Thanks to direct stimulation of the auditory nerve, it enables more than half a million people worldwide to hear, even though those affected were born deaf or deafened. In close collaboration, researchers from the Faculty of Medicine and the Faculty of Engineering at the University of Freiburg have developed a method to convert the stimulation electrodes of common CIs into electrochemical sensors. With the help of this novel sensor function, the functionality of cochlear implants could be monitored directly in the inner ear in the long term. The researchers published their results on December 9, 2021 in the journal *Biosensors and Bioelectronics*.

"For the first time, specific sensor protocols allow the classic stimulation electrodes of the cochlear implant to be used as highly sensitive and accurate microsensors," explains Dr. Andreas Weltin, group leader at the Department of Microsystems Engineering (IMTEK) at the University of Freiburg. "This sensor function is the basis for smarter implants that could monitor the implant's condition and its environment directly in the inner ear."

It has already been possible to measure the oxygen content of the implant environment reliably and without affecting auditory nerve stimulation in animal models. The next step will now be to verify how consistent the sensor properties in the animal model are over a longer period of time. "If we also achieve positive results here, it could be an important milestone on the way to permanent sensor-based monitoring of cochlear implants," says Dr. Nicole Roßkothen-Kuhl, Medical Faculty of the University of Freiburg and head of the Neurobiological Research Laboratory in the Department of Otolaryngology at the University Medical Center Freiburg.

Implant recipients would benefit greatly from such on-site monitoring. "The more precise the information we receive about possible changes, the better implants can be developed to enable perfect hearing for as long as possible."

Story source:

University of Freiburg. "Cochlear implant as a sensor."

New 1:1 Virtual Appointment System

We wanted to share with you the news of our new appointment system which is available for anyone who has a hearing loss who may be a candidate for a hearing implant, as well as current MED-EL users.

MED-EL Connect with You is a 1:1 appointment booking system which provides candidates and MED-EL users with the opportunity to make a 30-minute virtual appointment with one of our Senior Clinical Specialists.

The service can be used to raise any questions or to gather more information on the topics below:

Implant Choice Information

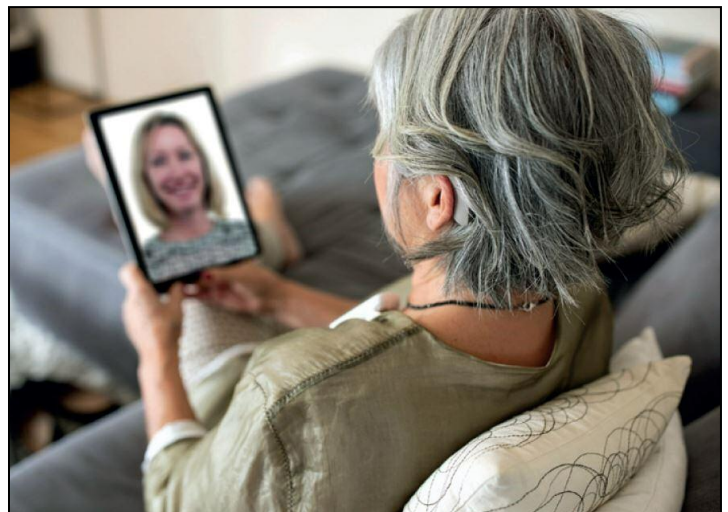
- Are you considering a hearing implant?
- Unsure which implant is suitable for you?
- Do you need help with considering the options available?

Implant Safety Question

- Do you already have a hearing implant and are due to have a medical procedure and need more information?

Product Information

- New to MED-EL and want to know



more about our products, including connectivity tips and tools?

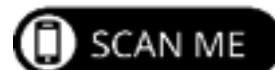
Rehabilitation Information

- Here at MED-EL we have a comprehensive range of rehabilitation tools and resources

Need an appointment?

Visit our website below, select a date and time, add your contact details, then click 'book'. You will receive an email acknowledging your booking, including a link to join your virtual appointment, it's so simple!

<http://www.tinyurl.com/Medel-Events>



Listening to Music with a Cochlear Implant

Nine out of ten MED-EL recipients surveyed said that music sounds pleasant through their cochlear implant*. This is partly down to the design of our cochlear implants, which closely mimic natural hearing.

But it's also through practice: The more you listen to music, the more you'll be able to appreciate it. It's never too early or too late to start practicing music training with your cochlear implant so here are some simple tips to help you to enjoy music with your cochlear implant.



1. Start Simple

Start with simple songs, such as a solo piece with lots of repetition. Search piano solo or guitar solo in your search engine. Listening to music with a strong beat (like rock or hip-hop) might be easier to begin with. Cochlear implant recipients report that Johnny Cash's early songs, such as "I Walk the Line", sound very natural and are easy to follow. These songs have characteristics that may make them suitable for early listening with a CI, such as a limited number of instruments (quite often only guitar and percussion), a clearly defined rhythm, Cash's baritone voice, and a singing style that closely resembles speech. Progress to listening to more complex pieces of music with more instruments as you feel comfortable.

2. Stick to Your Favourites

If possible, listen to familiar tunes. The music you listened to when you were younger may be easier to understand as your memory helps fill in the gaps.

3. Use an Assistive Listening Device

Use headphones or direct audio input via an Assistive Listening Device to gain the best sound quality.

4. Add Visuals

Watch live music or video clips in which you can see the music being played or sung or read along with the lyrics while you listen.

5. Broaden Your Musical Tastes

Listen to classical, pop, country, rock, folk, and other genres to find styles and instruments you prefer to listen to.

6. Practice, Practice, and Practice

Practice identifying songs, sounds, and instruments to improve perception and discrimination of relevant music parameters, such as pitch.

*Müller, J., Brill, S., Hagen, R., Moeltner, A., Brockmeier, S.J., Stark, T., Helbig, S., Maurer, J., Zahnert, T., Zierhofer, C., Nopp, P., & Anderson, I. (2012) Clinical trial results with the MED-EL fine structure processing coding strategy in experienced cochlear implant users. *ORL J Otorhinolaryngol Relat Spec.* 74(4),185-198.

MED-EL Meet Up - Hearing Implant Information Days in 2022



We wanted to share with you news of our upcoming events for existing implant users and those who may be considering a hearing implant.

Are you an existing implant user?

Come along to see 'what's new' as well as receive tips and advice about getting the most out of your audio processor.

Are you considering a hearing implant?

Choosing the right implant is a big decision. Find out more about hearing implants, connectivity and lifestyle accessories, and chat to families who have been in your position.

Something for everyone

- Meet our HearPeers Mentors
- Ask the experts
- Free lunch & refreshments

Save The Date!

29th January – Bristol

26th February - London

5th March – Leeds

19th March - Glasgow

30th April – Cardiff

21st May – Newcastle

18th June – Belfast

8th October – Warrington

3rd December – Birmingham

If you would like to enquire about any of the above events, please email marketing@medel.co.uk.

To register to attend please visit our website:

<https://tinyurl.com/Medel-Events>



Don't know where to start with your hearing implant rehabilitation?

Download MED-EL's Hear Today app for rehabilitation tips at the right level for you.

Hear Today is a resource developed for young people and adults with a hearing implant. It provides useful information on how to start the rehabilitation process. Practical tips and strategies for a variety of goals are provided along with suggestions for other helpful resources.

Compatible with Smartphones or iPads the app can be downloaded from the AppStore and Google Play.



Whilst working with the Implant centre some time ago CICADA developed an app for newly implanted CI patients who had previously been given a Rehabilitation exercise book as part of the post operation treatment.

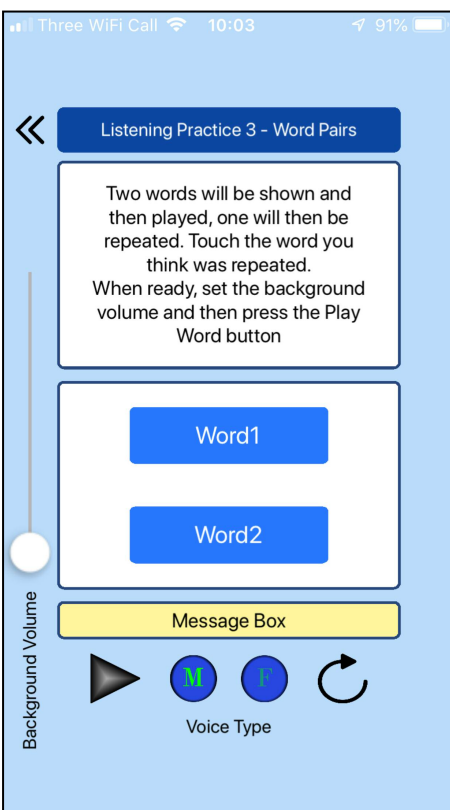
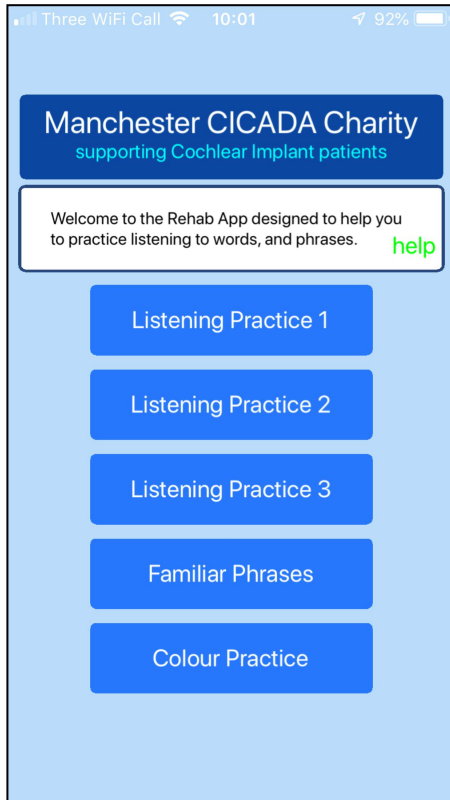
It consisted of a series of exercises where one person would read out words or phrases from the book for the CI user to practice listening.

We realised that it was not always possible for people who lived on their own or who just wanted an odd moment to practice, to use the book successfully and so we developed the CI Rehabilitation App, free for use on iPhones/iPads and Android phones/Tablets.

These are a few of the screen shots of the App to show how it operates. The

exercises follow the content of the book but in addition allow the user to hear the words and phrases with either a male or female voice.

Later exercises include listening to phrases and have the option of adding background noise to the words to try and make it more realistic including the dreaded coffee shop clatter and buzz.



Lip reading corner



Barbara

This section of the magazine is a regular feature in future editions of Resound. Many of us consciously or unconsciously lip read when talking to others, and this has become infinitely more obvious during the pandemic.

We have two members, Barbara Hitchins and Alison Cookson who are both active members of ATLA and deliver lipreading classes in the North West.



Alison

I hope you all had a good Christmas. For people who have a hearing loss, celebrations with family and friends can be difficult. I used to think that if I just tried harder, I would be able to follow conversations. Since becoming a lipreading teacher, I know it's not about trying harder. In our lipreading class we try to help people understand why they might find it difficult to follow a conversation.

Firstly the environment might be very noisy, with different conversations, music playing, children laughing. At Christmas, flashing lights and decorations can also be distracting.

Then, the person speaking might not speak clearly. Perhaps they have a beard or moustache hiding their lips. People might look away when talking, or put their hand in front of their face.

The topic of conversation may be difficult to follow. If we join a conversation part way through it can be difficult to know what is being talked about. It can be tricky to follow the ins and outs of peoples lives, if we haven't seen them for a while.

Finally, if we're feeling tired, or ill, or have a lot to think about, it can be difficult to concentrate on what someone is saying to us.

So if you're having difficulty following a conversation, remember there are different reasons for this, and you may be able to think of things that will make it easier, but above all, be kind to yourself. Happy New Year.

Barbara

When the brain switches from Hearing to Listening

What happens in the brain when simply hearing becomes listening? To answer this question, researchers at the University of Basel have traced the neuronal fingerprint of the two types of sound processing in the mouse brain.

It is intuitively clear to us that there is a difference between passive hearing and active listening. Attention and an animated state, but also movement, play a role in how sound processing in the brain adjusts accordingly.

Neuroscientists Professor Tania Rinaldi Barkat and Dr. Gioia De Franceschi from the Department of Biomedicine at the University of Basel have provided an accurate account of what happens in this process in the journal *Cell Reports*.

For their study, the researchers examined the activity of neurons in four different areas in the brains of mice known to be involved in increasingly complex sound processing.

During the experiment, the animals were either passively hearing the sounds played to them, or actively listening to them to receive a reward for detecting the sounds.

Activity pattern depends on various factors

It was shown that the majority of neurons changed their activity when switching between hearing and listening. "But this doesn't mean that all neurons behaved the same way," explains De Franceschi. "We actually

found ten distinct and specific types of activity change."

While most of the neurons showed a change that was probably related to varying levels of attention, some of them also showed patterns of activity that were related to the arousal level of the mice, their movement, the availability of a reward, or a combination of these factors.

Impact on all processing levels

The auditory pathway in the brain consists of a number of different nuclei that relay acoustic information from the cochlea to the primary auditory cortex. Two of the four areas along the auditory pathway studied by the researchers are thought to be at a "higher level" in terms of processing complexity. "At the beginning of our study, we suspected that these were the areas particularly affected by attention to sounds," said Barkat. "Surprisingly, however, this wasn't the case."

Attention also alters activity in brain areas previously thought to perform only basic forms of sound processing.

"The results make it clear that even the detection of a simple sound is a cognitive process that profoundly and extensively shapes the way the brain works, even at very early stages of sensory processing."

Story Source:

Materials provided by University of Basel. Note: Content may be edited for style and length.

Clear Facemasks and the NHS

Government delivers 250,000 clear face masks to support people with hearing loss

250,000 clear face masks are to be delivered to frontline NHS and social care workers to support better care for people who use lip-reading and facial expressions to communicate.

NHS and care workers will be given clear face masks to help them communicate with people with certain conditions like hearing loss, autism and dementia, the government has announced.

The masks are see-through and have an anti-fogging barrier to ensure the face and mouth are always visible to help doctors, nurses and carers communicate better with their patients.

With around 12 million people in the UK thought to have hearing loss, the masks will be invaluable for people who need to lip-read to communicate during the ongoing response to the coronavirus (COVID-19) pandemic and beyond.

The masks will also help those who rely on facial expressions to support communication. For example, people with learning disabilities, autism or dementia, or foreign language speakers and their interpreters.

The new deal with US-based company ClearMask will see 250,000 masks delivered to NHS trusts and social care providers across the UK over the next few weeks.

Minister for Care Helen Whately said:

Everyone using our remarkable health and care system deserves the best care possible and communication is a vital part of that.

This pandemic has posed numerous challenges to the sector, so we are always on the hunt for simple solutions to support those giving and receiving care.

The introduction of clear face masks will help overcome some of the difficulties carers wearing PPE are facing communicating with people who rely on lip-reading. If this proves a success I look forward to increasing the supply to make sure whenever a clear mask is needed, there is one available.

This applies across the whole of the UK and the government is working with

the devolved administrations on allocations of the masks. The first delivery has already been distributed to NHS trusts, with further deliveries over the next couple of weeks.

Social care providers will also have access to the masks through a new pilot system with Local Resilience Forums.

The Department of Health and Social Care and NHS England and Improvement will continue to work closely with suppliers on future orders based on demand.

The clear masks have met the government's strict safety standards and will be rolled out to frontline workers over the next few weeks.

The government has delivered over 3 billion pieces of personal protective equipment (PPE) to the frontline and are working with around 130 new companies, including Royal Mint, Honeywell, Amazon and Royal Mail, to rapidly manufacture, source or distribute PPE at scale and pace.

This follows a national and international call to arms in April asking industry to channel their manufacturing power into making PPE for the health and care sector.

Roger Wicks, Director of Policy and Campaigns at Action on Hearing Loss, said:

We welcome the procurement of clear face masks, which has the potential to improve the accessibility of health and social care services for those who rely on seeing facial expressions and lip-reading to communicate, including people who are deaf or have hearing loss.

Since the outbreak of coronavirus, people have told us continually that they are worried about communicating in health and social care settings where face masks are now in constant use. We know that clear masks have the ability to reduce barriers for both patients and staff across the NHS and social care services.

People need to understand the information and instructions that they are given by health and care professionals: ineffective communication and misunderstandings have the potential to harm the health and wellbeing of people with hearing loss.

We hope that different services across the NHS and social care are able to access clear masks and effectively match them to patient need. It will also be important that these masks are complemented by effective communication tips and deaf awareness among staff to ensure that people with hearing loss

get the support they need.

Professor Andrew Goddard, Royal College of Physicians President, said:

The necessary use of face masks to protect staff and patients has made communication difficult. It's particularly true for clinicians and patients who are deaf or have a hearing loss and rely on being able to read lips.

Clear communication is always important, but particularly in healthcare. So we're pleased these masks are going to be available very soon.

Of course, lip-reading doesn't work for everyone, nor is it everyone's first choice. It's important that all NHS employers and services find out what someone's communication needs are and meet them, in line with the Accessible Information Standard.

Sarah White, Head of Policy and Campaigns at national disability charity Sense, said:

The last few months have been particularly hard on disabled people and a part of this are the barriers that PPE brings to many of them in terms of their communication. While PPE is of course vital in keeping everyone safe during this pandemic, many disabled people rely on lip-reading and facial expression to communicate, which means masks present themselves as a big challenge.

We've therefore been delighted to work with the Department of Health and Social Care and other organisations to raise awareness of this issue and we welcome the introduction of clear masks for use in frontline health and social care services, which will benefit millions of disabled people in this country.

While clear masks won't work for everyone and they can still present a challenge to some people, it certainly is a great first step which should be part of a clear and cohesive strategy for how we ensure that health and care services remain clinically safe at the same time as enabling disabled people to communicate and feel safe.

Allysa Dittmar, President of ClearMask, said:

As a company that was started in 2017 in a response to the need for improved, visual communication for the deaf and hard of hearing community, we immediately understood the critical need for such see-through, transparent masks during this pandemic for many different groups of people.

We were proud to help answer the call for critical PPE for the NHS, and this partnership is a reflection of the hard work and dedication of many individuals involved in the push for better accessibility and care during this time.

Notes

As we move from the lockdown, keep an eye open on the website and Facebook pages for more news of events and meet up's. Also if you can access a PC we can organise Zoom chats as well.

We would welcome any feedback or suggestions for events, articles for Resound especially on your experiences of the lockdown.

Either email
secretary@manchestercicada.org.uk

Or write to me at the address below, all submissions are welcome.

CICADA

Website: www.manchestercicada.org.uk

Facebook group: Manchester CICADA club

Secretary direct contact: Text 07533217730

Main contacts for cicada listed at the bottom of this page.

Manchester Implant Centre

The Richard Ramsden Centre for Auditory Implants, Peter Mount Building, Manchester Royal Infirmary, Oxford Road, Manchester, M13 9WL

Main Contact Details:

Tel: 0161 701 6931 (Appointments)

Tel: 0161 276 8079 (repairs and spares)

* Please check the website regularly for updates on what the clinic are doing in the light of the virus outbreak.

<http://www.manchestercicada.org.uk/implant-clinic/>

National Support organisations

British Tinnitus Association:

<https://www.tinnitus.org.uk/>

Hearing Link:

<https://www.hearinglink.org/>

RNID (Action on Hearing Loss):

<https://www.actiononhearingloss.org.uk/>

Disabled Travel Advice:

<http://www.disabledtraveladvice.co.uk/>

Meniere's Society:

<http://www.menieres.org.uk/>

National Deaf Children's Society:

<http://www.ndcs.org.uk/>

National Association of Deafened People

(NADP): [http:// www.nadp.org.uk/](http://www.nadp.org.uk/)

Equipment Suppliers for Deaf People

Sarabec: <https://www.sarabec.com/>

Connevans: <http://www.connevans.co.uk>

Hearing Link UK: <https://www.hearinglink.org/>

RNID (Action on Hearing Loss):

<https://www.actiononhearingloss.org.uk/>

COVID-19 information links.

(Just some official ones which you can subscribe to to get updates)

Main government website which has links to information and also a facility to be on a mailing list for updates which is handy.

<https://www.gov.uk/coronavirus>

Most local council websites now have a corona virus section to tell us what they are doing and what services may be affected.

If you need help for other things during the duration of the virus then contact social services in the first instance.

Chairman	Honorary Treasurer	Hon Secretary
John Newton	Alan Corcoran	Kevin Williams
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