Finding a Hearing Aid Compatible Cell Phone

If you have hearing aids or a **c**ochlear **i**mplant (CI), hearing on cell phones and wireless phones is a challenge. (Wireless phones are landline based portable phones). I have spent many hours talking to cell phone sales people who just do not understand **H**earing **A**ids (**HA**) or hearing loss in general. It is, therefore, incumbent upon us as effective consumers to become informed before we buy and not rely on the expertise of the floor salesperson.

A few tidbits first:

- As of December 2014, 90% of American adults have a cell phone and 64% have a Smartphone.
- There are over **355 million** active wireless subscriptions in the U.S. – 36 million more devices than Americans, a wireless penetration rate of 110 percent.
- Wireless carriers offer data plans for consumers with disabilities including texting, e-mail, and web access. Ask.
- The majority of people with hearing limitations are using wireless to text, e-mail, and access the Internet.
- Studies show that once seniors learn to use devices, digital technology often becomes an integral part of their daily lives

CTIA Wireless Association
HLAA National Convention 2015

A great resource for facts and suggestions is http://AccessWireless.org . It represents a good starting point to gather information.

The key starting point is the acronym **HAC** or **H**earing **A**id **C**ompatibility. This is a reference to the connection between the handheld set and the HA/CI. It does not refer to other wireless devices. Each device, cell phone and HA/CI have electronic issues that can cause a buzz or other interference. Each has a rating. A number of HOH users are familiar with the rating for the phone. However, very few realize that hearing aids have a similar rating. When one decides to purchase a cell phone, it is a smart consumer that checks on the HAC rating of the hearing device. An audiologist or the manufacturer's website is the primary resource for this information. In reality one must be assertive to find this information. It is not readily available because so few people have sought it out. Cell manufacturers have been singled out by the FCC to make their phones compatible. However, the FDA regulates the aids and implants. Manufacturers are saying they are being targeted and the HA/CI manufacturers have a responsibility as well.

In general the ratings range form 1-4 with four having the least interference. Rate the phone and rate the hearing aid. A combined score of 6 or better is deemed acceptable. Keep in mind that these numbers are starting points. (Without checking the HA score) One person may find a cellphone 3 very acceptable and a cellphone 4 unacceptable. Another will find that only a 4 works for them. So, there is still a trial and error component. That is why the FCC requires the dealer to have a live phone for testing or to allow the user to take a phone home and return it within "X" days without penalty if the phone is incompatible. (The problem arises when you change your phone number over to the new phone and then try to change it back. It can be a hassle and a paperwork/billing nightmare.) Salespeople may argue the return policy. Make sure you read the fine print before leaving the store. Have a clear understanding of your rights and the contract.

We have been talking about numbers in general. On the box, the website or the store label, you will see a HAC score stated as M4T4, M3T4, M3T3, or M4T3. (Scores below 3 will be reported as not HAC compatible or the ear with a line through it.)

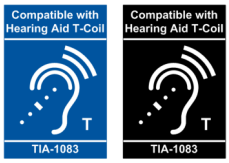
The "M' refers to microphone. The 'T' refers to tele-coil (t-switch or telephone switch—all are the same.) The microphone is the microphone on the hearing aid. The 3 or 4 describes how much interference there is between the cell phone and the microphone. In tele-coil mode, the HA microphone is usually turned off and the tele-coil is turned on. The tele-coil is basically an electro magnet in the HA that is activated by an electro magnet in the phone. In most cases this is an elegant way to hear on the phone. No background noise. Again, the 3 or the 4 relates to the amount of interference the phone or aid develops.

Our goal is to make an Informed Buying Decision:

1. Did you check your HA score before purchase? What is it?
2. Some phones will have a program that optimizes the phone for HOH/deaf. Before testing ask the sales person or read the manual.
3. Make trial calls in both the microphone mode and the T-coil mode.
4. Tele-coils vary and may work well on one phone but not another even though the HAC scores are the same. This has to do with the orientation of the coils. Changing how you hold the phone may change the alignment and the quality of sound.
5. Hearing loss profiles vary significantly from user to user, so other solutions beyond HAC may be helpful. A Com-pilot, Roger, Neck-loop, Blue-tooth etc. may be both helpful and necessary. The salesperson will likely be totally unaware of what these are. Check with both the phone manufacturer and the HA manufacturer for assistance. Many will list this under their "disability" section.
6. Check out the **G**lobal **A**ccessibility **R**eporting **I**nitiative (GARI), https://www.gari.info/ ,

http://accesswireless.org/Find/Learn-GARI.aspx

7. Know the return policies. Understand the contract even the fine print.
8. Understand that the smaller the device the harder it will be to meet HAC.
9. Wireless handheld land based phones will have a HAC label but no visible number ratings. They are under a voluntary standard.
10. Look for logo:



11. **Bottom line, try before you buy.**

CTIA, The Wireless Association
TIA, Avonne Bell
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Some of the newer phones are offering "Wideband AMR (WB-AMR)". This is basically high definition sound over the phone. Again on a trial and error basis this may provide clearer, stronger, more understandable sound. "HD Voice is becoming the new normal."

CTIA, The Wireless Association
Harold Salters, T-Mobile USA
HLAA National Convention, 2015

Check out:
http://accesswireless.org/Disability-Categories/Hearing.aspx

Other issues regarding HAC compatibility relates to the cellphone companies broadcast system. Two systems are commonly used in the U.S. are CDMA and GSM. CDMA systems seem to have better HAC ratings and more frequent M4T4 ratings. GSM is a system that is used both here and in Europe. It tends to have more scores that look like M4T3 or M3T4. In the past GSM companies had difficulty reaching a 4 score. That is rapidly changing. Most companies seem to use the GSM system because its users travel the world and the phone is usable in more places. Sprint and Verizon tend to be CDMA while the other companies tend to be GSM. I found that I could not hear on an I-phone on the AT&T network but could hear on the same phone on the Verizon network. That is the difference between GSM and CDMA.

Understand that improvements occur rapidly and some of this information may be out of date next month. Do your homework. Be a good consumer. Try before you buy.

A major component of cell phones is APPs. The HLAA KY Home will discuss APPs at their August 24 meeting. We will discuss them in our September www.hearinglosskyhome edition.