

How to Buy a Cell Phone when You Have a Hearing Loss

Purchasing a cell phone when you have a hearing loss can be a daunting task.

How do consumers know which cell phones will work for their hearing needs? Why do some cell phones work for some people with a hearing loss but not others?

The Federal Communications Commission's (FCC) fact sheet on "Hearing Aid Compatibility for Wireless Telephones" provides an excellent overview of this topic and can be accessed at www.fcc.gov/cgb/consumerfacts/hac_wireless.html. ATIS Hearing Aid Compatibility Incubator and CTIA-The Wireless Association also developed a terrific brochure on "Hearing Aid Compatibility for Wireless Telephones and Services," which can be viewed at www.accesswireless.org/files/pdf/HACBrochure.pdf.

Notwithstanding these brochures, consumers are still confused by the process of buying a cell phone. Our family found the choices overwhelming and the terminology baffling when we went to purchase a cell phone for our daughter who has a hearing loss. During our family's quest, I developed the following decision tree.

1. What do the ratings mean?

Effective September 16, 2006, the FCC mandated that cell phone providers must offer at least two handset models that have a minimum M3/T3 rating.

The M rating (M3 or 4) represents microphone interference potential to a hearing aid from the cell phone and the T rating (T3 or 4) represents the telecoil coupling capability of the cell phone. The higher the rating, the more likely the cell phone will be compatible with a hearing aid.

The minimum number of compliant handset models will soon be increasing. Service providers will have to meet an M3 rating for 50 percent of their models or 8 models per air interface, whichever is less, and a T3 rating for 33 percent of their models or 3 models per air interface, whichever is less.

An M4/T4 rating is available only for cell phones using CDMA technology and carried by Sprint and Verizon. M4/T4 ratings are not available in phones using GSM technology and carried by AT&T and T-Mobile. Phones using GSM technology can only achieve M3/T3 as their highest rating.

2. What is my hearing aid's Radio Frequency (RF) immunity level to the interference caused by cell phones?

Immunity refers to how well your hearing aid is protected from the interference that may be caused by cell phones. Your audiologist can provide this information and it is important to know prior to purchasing a cell phone.

The M ratings of the hearing aid and the cell phone need to be added together to have a sum of 5 or more, or an M5 rating. The higher the sum of the two ratings, the more likely the cell phone will not interfere with



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your hearing aid when it is used on its main program. Therefore, a hearing aid should have a minimum immunity rating of at least M2 since compatible cell phones will be rated either M3 or M4. Most current hearing aids have a rating of M2 or better. The hearing aid immunity rating varies by company and product. A higher M rating is likely to perform better than one with a lower M rating. A higher phone rating is needed if the hearing aids have a lower M rating, such as for older hearing aids.

Ratings for a hearing aid's telecoil immunity to interference are not currently offered. This rating will, hopefully, be available from the hearing aid industry in the near future. For now, T ratings do not provide much insight.

3. What type of hearing aid do I have?

In-the-ear-canal (ITE) hearing aids may provide less interference than behind-the-ear (BTE) hearing aids. ITE hearing aids have a greater distance between the microphone on the hearing aid and the antenna on the cell phone, which can lessen interference for the user.

Switching hearing aid styles may allow the user to purchase a cell phone with a lower M rating that may not have previously been an option.

My daughter was able to purchase a Blackberry with a lower M rating in a GSM transmission technology because she switched from a BTE to an ITE hearing aid. She was previously unable to use this phone in the GSM transmission technology when she wore a BTE hearing aid. Not all hearing aid styles are appropriate for all levels of hearing loss, but a switch is worth investigating.

Keep in mind that sometimes repositioning the cell phone over the ear or hearing aid can also help lessen interference, especially for those who are unable to switch hearing aids.

4. What type of cell phone coverage do I need?

It is important to determine whether domestic or international coverage is needed. There are four transmission technologies worldwide. In the United States, there are essentially two transmission technologies, CDMA and GSM, with four tier one carriers that provide coverage across the U.S. – Sprint, Verizon, AT&T and T-Mobile. Different transmission technologies provide different coverage. In addition, the dominance of GSM and CDMA technologies differs internationally. Some phones can now operate using either CDMA or GSM technology. The following Web sites provide coverage maps for the CDMA and GSM transmission technologies: www.cdg.org/worldwide/index.asp and www.gsmworld.com/index.shtml.

Cell phones operating in the CDMA transmission technology are rated either M3 or M4, but cell phones in the GSM transmission technology are only rated M3. Weighing GSM coverage versus an M4 rating is a personal decision.

5. What is the cell phone rated?

Researching different cell phones prior to entering the store will save you a tremendous amount of time and frustration. Look on the carrier's Web site prior to visiting the store. The Web sites for the four major carriers are:

- **AT&T** – www.wireless.att.com/about/disability-resources/hearing-aid-compatibility.jsp
- **Sprint** – www2.sprint.com/mr/gp_dtl.do?article=341
- **T-Mobile** – www.t-mobile.com/Company/Community.aspx?tp=Abt_Tab_Safety&tsp=Abt_Sub_TTYPolicy
- **Verizon** – <http://aboutus.vzw.com/accessibility/products.html>

Another Web site that provides third-party information and user reviews on most of the cell phones is www.phonescoop.com/phones/finder.php. Every cell phone store should provide documentation for cell phones rated as hearing aid compatible. The information should be on the placard by the cell phones and on the box. Sometimes the information on the placard is really tiny, so look carefully.

6. Can I do an in-store cell phone test?

Only carrier stores are required to allow consumers to test the phones rated as hearing aid compatible prior to purchase. It is important to test the phone in a noisy as well as a quiet setting. Make sure there is room to adjust the volume control of the phone when testing the phone in a noisy setting.

7. Am I able to test the cell phone at home?

Every vendor has a different return

policy, so read it carefully and ask if there are any early termination fees. Save all the packaging. Stores will not take back merchandise without all the packaging and a receipt.

8. Is there too much magnetic noise in the background when the volume is adjusted?

The backlight typically turns on every time the volume control is adjusted. Manufacturers are not required to test the interference potential of the backlighting on the phone, but it can create interference for consumers who use their telecoil for listening. Telecoil users should assess whether they can hear interference when the backlight is on when testing a cell phone.

In conclusion, technology is constantly changing so keep this in mind when selecting a contract length, especially if you have a fluctuating or diminishing hearing loss. A carrier may not allow early termination of a contract if your hearing loss changes.

There is no perfect phone for every person with hearing loss. It is a matter of trial and error. Answering the above questions can assist in narrowing your options when buying a cell phone. ♪

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