

Hillcrest HealthCare News[®]

A newsletter for our patients, their families and friends



Fall 2013

Why Don't My Batteries Last Longer?

Although today's mercury-free hearing aid battery has more than twice the energy as just a few years ago, there is still a trade-off between hearing aid size and battery life and between hearing aid features and battery life.

Hearing aid size

As improvements in battery technology have increased battery life, manufacturers have made hearing aids smaller and smaller. One way to accomplish this is to reduce the size of the battery.

For example, many hearing aids now use a #312 battery. Although only 1/5 the size of the once-popular #675 battery, the #312 lasts almost as long as the larger battery of years ago.

Hearing aid technology

There are also compromises between advanced hearing aid features and battery life. Wireless features allow hearing aids to communicate with each other and with other devices such as telephones and televisions—but this capability uses additional battery life.

Noise control programs and automatic directionality can provide important benefits to hearing aid users—but these features also need some of that battery energy. Even the amount of sound being amplified affects battery life.

About that "mercury-free"

Hearing aid batteries once contained as much as 50% mercury. But mercury is toxic and harmful to the environment, so in the 1990's, the amount of mercury was reduced to about 1%. Today, hearing aid batteries are available with absolutely no mercury.

Modern hearing aid batteries now use zinc as their major component. Their second major ingredient is air. And today's zinc air batteries are not only safer and better for the environment, they last more than twice as long as the older mercury battery.

Battery tip: When you remove the paper tape from your battery, let the battery sit for about a minute before using. This allows the battery to charge fully from the surrounding air.

Economy batteries: Not all batteries are the same, even if they look the same. We use only factory-fresh, premium long-lasting batteries. Some retail outlets may have batteries that have been stored for two years or even longer.

Global Humanitarian Hearing Health Care Efforts

The World Health Organization (WHO) has identified hearing loss as a serious worldwide health issue and estimates that more than 300 million people in the world have significant untreated hearing loss.

Global humanitarian audiology efforts are aimed at bringing improved hearing health care to developing countries throughout the world. Projects include:

- medical services, especially to children susceptible to ear infection;
- audiologic services, including the fitting of hearing aids;
- hearing aids, often supplied at no cost by manufacturers;
- training to local residents to provide sustainable hearing care services;
- audiologic equipment in areas that have trained personnel;
- educational and vocational training opportunities for children and adults with hearing loss.



What's Your Favorite Program?

Back in the "old days," hearing aids had a single program. They amplified the same regardless of the sound around you.

Modern digital hearing aids automatically respond and adjust to the sound around you. Digital hearing aids can cancel feedback (that whistling sound), reduce the amount of amplification automatically, or become directional to focus in on speech.

In addition, many hearing aids have several programs available. The programs are selected by a button on the hearing aid or via a remote control.

Hearing aid users sometimes ask for a program specifically designed for a particular setting, such as a classroom, noisy restaurant, or when travelling in a car. That program is custom-designed for each individual. For example, the "noisy restaurant" program doesn't simply make all sounds sound softer. Instead, the program can reduce background noise, add additional control for loud sounds and become more directional (to reduce noise from behind you).

The "noisy restaurant" program makes a noisy restaurant more comfortable. But remember, no sound processing can make listening in a noisy restaurant *easy* or *comfortable*—after all, people with perfect hearing have those same complaints!

Some people don't use these additional programs, but on average, hearing aid users will use a second or third program about 10% of the time.

- promoting awareness and efforts for the prevention of hearing loss.

Audiologists, hearing aid specialists and physicians volunteer their time and expertise travelling to countries around the world on humanitarian audiology missions, often at their own expense. Many foundations, associations and manufacturers around the world support these efforts.

For example, the **International Hearing Foundation** funded three international projects in 2012. **Hear The World Foundation**, sponsored by Phonak, supports projects in Cambodia, Kenya, Malawi and Thailand. The **Oticon Hearing Foundation** funds hearing clinics in Xanthia, South

Africa and Parintins, Brazil, that provide audiologic testing services and hearing aids to previously unserved populations. The **Starkey Hearing Foundation** has donated more than 500,000 hearing aids and direct services in more than 25 years of global humanitarian services in locations such as New Guinea, Tanzania, Laos and Guatemala. The **Rotary Foundation** supports local Rotarians around the world to provide hearing care and other health services.

Many of these cases of hearing loss are preventable, with causes such as ear infection, impacted ear wax, and infectious diseases such as rubella, meningitis, measles and mumps. Almost all are treatable medically or through the use of hearing aids, but with more than 300 million children and adults in the world affected with hearing loss, the vast majority remain undetected and untreated.

Healthy Heart, Healthy Hearing

The most common causes of sensorineural hearing loss are noise exposure, aging, familial history and diseases of the ear.

Several studies have also found a connection between cardiovascular health and hearing. For example, people with high blood pressure or arteriosclerosis are more likely to have hearing loss.

There also appears to be a positive relationship between general cardiovascular fitness and hearing, at least in people over 50 years old. These differences are not seen in the under-50 age group.

Several studies even found improvements in hearing thresholds following extended cardiovascular exercise program. It appears that a healthy cardiovascular system can minimize the effects of aging on hearing.

Communication Tips and Your Medical Care

Poor communication is a leading cause of errors in medical diagnoses and treatments, according to a report in a leading medical journal (*Journal of Internal Medicine*).

Hearing loss may make communication between you and your physician even more challenging, especially when serious health issues are at stake. Individuals with hearing loss should consider taking specific steps to ensure effective and accurate communication between themselves and their medical providers, including the following:

Let your medical caretaker know you have a hearing loss. It's not obvious to others, and this alert allows your medical specialist to make an extra effort to communicate clearly. **If necessary, politely make suggestions to make hearing and understanding easier for you.** Your nurse, physician's assistant or

physician may not know that turning away, putting a chart in front of his or her face or talking while looking down makes it more difficult for you to understand.

Ask for written information and written instructions. This is always a good idea. Many people have difficulty remembering information and instructions following a visit to the doctor.

Repeat the question if necessary. Asking, "Doctor, did you ask me how long I've had this cough?" is better than guessing.

If in doubt, ask for another set of ears. It's a challenge to hear, understand and remember everything that's said, even in the best of circumstances. Asking a family member, trusted friend, caregiver or interpreter to accompany you should reduce both the stress and the possibility of a misunderstanding.

Hospital Noise Levels

Another factor that may affect health is the noise levels in many hospitals. According to a *Wall Street Journal* article, hospital noise can disturb patient sleep, affect blood pressure and interfere with patient recovery. Hospitals have something in common with restaurants—a common complaint is "too much noise."

Many hospitals have developed programs to control noise levels, including the use of personal pagers instead of public address systems, "quiet" periods and noise monitors. These efforts should gain momentum since Medicare payment rates now include patient ratings of quality of care—and hospital noise levels usually get the worst marks.

Exceptional Services

The **Heart of a Hearing Aid Campaign** is our effort to collect unused hearing aids that can be used by others or used for salvage parts. In October, **Allen Massie**, a Hearing Instrument Specialist with over 45 years of hearing health care experience, will be making his 17th medical mission trip to Pucallpa, Peru. He will be bringing the gift of hearing with the help of these donated hearing aids, to a very grateful region. You too can make a difference in someone else's life by supporting this worthwhile project. Donations can be dropped off at any of our 5 locations and can be used as a charitable deduction.

We are excited to welcome to our hearing health care team, Audiologists: **Dr. Jenna Dube**, University of Massachusetts, **Dr. Katie Cisler**, University of Louisville, and **Dr. Alison Newnam**, Kent State University, NE Ohio AuD Consortium, and Audiology Coordinators: **Donna Kubaszewski**, **Mandy Roberts**, **Nina Sirch** and **Kim Lukey**. Our additional staff allows us to expand the exceptional hearing health care services we provide to our communities! We look forward to servicing all your hearing health care needs!

Hillcrest Hearing & Balance Center: Better Hearing for a Better Life!

Sincerely,

The Audiologists, Dispensers and Staff of Hillcrest Hearing & Balance Center

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