

April 12, 2004

## HEARING LOSS AN INCREASING CONCERN

*By Reed Hellman*—We live in a very noisy world, and that noise is having an increasingly harmful effect on our ability to hear. According to the Centers for Disease Control, 30 million Americans suffer some form of hearing loss. About 25 percent of those people have had their hearing damaged by exposure to loud noise.

The National Institute for Occupational Safety and Health reports that hearing loss is the most common occupational injury and the National Center for Health Statistics has determined that 12.5 percent of people between the ages of 16 and 19 have some noise induced hearing loss. Ten million baby boomers suffer from some form of hearing loss and the Deafness Research Foundation estimates that 75 percent of age related hearing loss is due to exposure to noise.

The problem costs the nation \$56 billion annually — a figure that is growing. As our population ages, diagnosing and remediating hearing loss has taken on new importance.

The Towson-based Hearing Assessment Center was founded in January 1985. Its three audiologists — Dr. James M. McDonald, Dr. W. Stephen Seipp, and Dr. Melissa Anderson — provide a wide range of diagnostic and rehabilitative audiological services to individuals of all ages, stressing health and hearing-loss prevention. To meet increasing demands, the center has expanded to Lutherville, Essex (at Franklin Square) and Bel Air, and conducts many seminars to provide information about hearing, hearing loss, dizziness, and tinnitus (ringing in the ears). The center focuses on:

- Infant hearing testing
- Occupational and recreational noise induced hearing loss
- Auditory processing dysfunction (learning difficulties)
- Diagnostic hearing and balance testing
- High technology hearing aids

Otoacoustic emission testing — testing the hearing of newborn infants within 24 hours of birth — has become

one of the center's specialties. A recently passed Maryland state law requires all hospitals to perform universal infant hearing screening. The Hearing Assessment Center was the first in the area to perform the tests, beginning in 1989 at St. Joseph Medical Center. It now provides the service to St. Joseph, Franklin Square Hospital, Maryland General Hospital, and Anne Arundel Hospital.

The center now tests some 10,000 babies each year helping to significantly reduce problems with speech and language delays, Seipp said.

“We can determine right off the bat whether there is a hearing loss,” he said. “We want to get them in the first three months to reduce the overall effect ... starting earlier gives the best results.”

Though the equipment has been available for several years, newer technologies are easier to use, with results in less than three minutes.

The Hearing Assessment Center also diagnoses general audiology problems. Once a hearing loss or balance problem is identified, a variety of treatment options are available.

Digital hearing aids are the latest development. Computer chips in the devices can be programmed and reprogrammed to suit the needs of the wearer. Four-, 6-, 9-, and even 16-channel hearing aids can work with the individual's hearing loss characteristics and automatically adjust for softer or louder noises.

But not all hearing problems can be helped by a hearing aid. HAC also works with cochlear implants to help people suffering with total deafness. For some people, this surgically implanted device returns some ability to hear.

“Loop” systems have been used in theaters and public meeting rooms to assist the hearing impaired. In its simplest form, a loop of wire circling the theater, arena, or lecture hall is connected to an amplifier and sets up a magnetic field. Special hearing aids pick up the sound carried in that magnetic field.

Some systems used an FM radio signal to carry the sound, while many of the newest devices infrared technology, which is not subject to the interference experienced by user of some FM systems. Infrared systems are relatively inexpensive and lend themselves to personal use — for watching television, for instance.

For more information, Contact Dr. Seipp at the Hearing Assessment Center, 410-583-7021, or go to [www.HearingAssessment.com](http://www.HearingAssessment.com).