

# Now Hear This!

SPRING 2011

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## Message from the President

Lori Gardner, Au.D.

Happy Late Winter and Happy Early Spring! 2011 marks Hear Virginia's ninth year of existence and eighth anniversary. Has it really been eight years since we opened our doors on West Broad Street? We thank you for continuing to choose to come to us for your hearing health care.

Last Summer's Hearcation was so popular that we are offering a free "Spring Hearcation" to our loyal clients. Details about your Spring Hearcation can be found later in this newsletter, dear reader.

We are blessed and thankfully not overly stressed by the growing demand for our hearing services...which led me to

cancel our annual Anniversary Party. This year we invite you to celebrate our anniversary a bit differently. On Friday April 29, 2011, we will have an Anniversary drawing to determine the recipients of three lucky prizes: First Prize—An Asian "Throw" Sized Quilt (approximately 55" x 75" quilted by yours truly, valued at \$300); Second Prize—Dinner for Two at Tripps (gift card value of \$125) and Third Prize—a Year's Supply of Free Batteries (value of \$100). To enter our anniversary raffle, simply complete an entry card when you next visit our office between now and April 29. And, anyone who schedules and comes in for a Spring Hearcation appointment is entitled to a double entry to this drawing! Winners will be contacted by telephone.

Be sure to call and let us know what you liked best about our newsletter—favorite article, format, anything that strikes your fancy. First three callers will get a Panera gift card.

## IED Hearing Damage and the Military

When American military men and women go to war and fight on varied battlefields, we sadly know that many of these men and women return home with injuries. As they fight on noisy battlefields, American soldiers may sustain hearing related injuries. Military audiologists now report a marked difference in the type of ear related disorders that is currently diagnosed.

Widespread exposure to IEDs (improvised explosive devices) has resulted in greater numbers of traumatic brain injuries or TBI. TBI manifests complex acoustic trauma that can include auditory processing

disorders, tinnitus, and non-hearing related complications. Veterans of the first Persian War, Vietnam, and other conflicts of the Twentieth Century were also exposed to excessive or hazardous noise from small arms fire and light infantry, leading to hearing injuries in the ear instead of in the brain. Previous wars also produced more penetrating injuries to the brain, contrasted to the current 'epidemic' of closed head (non penetrating) injuries. While it is good news that our soldiers now have improved helmets and other kinds of body armor, closed head injuries or

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**Hear** Virginia

**BATTERY  
BONANZA!**

Buy **5** cards of batteries -  
get **1** card / pack **FREE!**

Buy **10** cards of batteries -  
get **2** cards / packs **FREE!**

## HEARCATION PASSPORT

*You and/or a loved one are invited to reserve an appointment to plan a Hearcation courtesy of Hear Virginia. Please bring your passport to your appointment.*

### Your FREE Hearcation includes:

- ✓ A FREE hearing evaluation and hearing consultation
- ✓ A FREE, two week, No Obligation Hearcation using the newest hearing technology selected by you and your Audiologist.
- ✓ Hearcationers receive \$500 off purchase of each premium digital hearing aid (or \$1,000 off a pair of premium digital hearing aids).

Hearcations must be scheduled and begin before Hearcation Season ends 4/29/2011.

*Hearcations may not be combined with hearing insurance benefits or with special financing.*

## Spring Hearcation

It's time to chase away the Winter Blues and treat yourself to the opportunity for better hearing! With the ongoing new options for success with hearing instruments, we invite you to call us to schedule your FREE Spring Hearcation appointment.

Your Spring Hearcation begins with a complimentary ninety minute hearing re-examination and hearing consultation with a Hear Virginia audiologist. If new hearing instruments are indicated, we will give you a two week Hearcation with brand new hearing instruments.

Yes, we will once again offer a discount of the cost of new premium hearing aids — \$500 per aid or \$1000 per pair. Simply call our Travel Agent (ahem, office manager) Gail Duncan at 282-5590 to book your Spring Hearcation. See the Hearcation Passport located at left for more information—and bring your Hearcation Passport with you to your appointment. To make your reservation (ahem, appointment), call our office today—reservations are limited. And yes, passports and reservations can be transferred or shared with anyone you think could benefit from a Hear Virginia Hearcation.

## IED Hearing Damage and the Military

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traumatic brain injuries still occur within the brain—and there is still no good way to protect against that.

In recent years, hearing related injuries continue to be the largest category of casualties among soldiers returning home from military duties. In 2008, one in four soldiers returning home from Iraq and Afghanistan were found to have tinnitus and other changes in hearing. The U.S. Military now requires all service members to have pre-deployment and post-deployment audiograms so that early concerns can be identified when servicemen return home—and so that proper



*Photo Courtesy of U.S. Army*

follow-up can begin. The Department of Defense and the Department of Veteran Affairs continue to be leaders in the development of new ways to diagnose and treat hearing disorders. A vigorous emphasis on hearing prevention and education has begun to show results, as fewer soldiers being discharged from the military leave with hearing problems.

## Hear Virginia

### OFFICE HOURS

Monday - Friday  
8:30 a.m. - 4:00 p.m.

*(Tuesday evenings by  
advance appointment, only.)*

**804.282.5590**

**[www.hear-virginia.com](http://www.hear-virginia.com)**



## Teens at Risk For Hearing Loss

Research on hearing loss in teenagers has documented an alarming and dramatic jump in the prevalence of hearing loss in adolescents aged twelve to nineteen years old. Researchers from Vanderbilt University published their findings in a recent *Journal of the American Medical Association*. Studies showed that teen hearing loss jumped from 31% (1988-1994) to 77% (2005-2006) for mild and worse case hearing loss. These results suggest that one in five U.S. adolescents twelve to nineteen years old (approximately 6.5 million teenagers) had hearing loss documented in 2005-2006.

This study examined two comparable data bases from two time periods within the last 20 years, questioning whether the current prevalence of hearing loss in the United States had changed over time and to assess the current characteristics of hearing loss in the 12 to 19 year old population.



Results were based on audiometric comparison of high and low frequency pure tone averages. You may remember

your pure tone hearing test as the task where your audiologist asked you to push a button or acknowledge each time you heard a very soft beeping or bell sound. Among the major points outlined in the JAMA article:

- High frequency (impairment in the treble or shrill pitches) was more common than low frequency (impairment in the base or lower pitches) in both time periods.
- Occurrence of hearing loss did not differ significantly by age, race, or ethnicity in either time periods.
- The majority of identified hearing losses were categorized as slight hearing loss, but the prevalence of greater hearing losses increased 77% from 3.5% in 1988-1994 to 5.3 % in 2005-2006.
- The prevalence of high frequency hearing loss was significantly higher in 2005-2006 than in the earlier study, but the prevalence of low frequency hearing loss was unchanged.

## 2011 Anniversary Raffle

Complete an entry card when you visit our office between now and April 29. And, anyone who schedules and comes in for a Hearcation appointment is entitled to a double entry to this drawing!

### 1<sup>st</sup> Prize (\$300 value)

Asian Quilt by Dr. Lori Gardner

### 2<sup>nd</sup> Prize (\$125 value)

Dinner for Two at Tripps

### 3<sup>rd</sup> Prize (\$100 value)

One Year Supply of Free Batteries

Drawings will be held on April 29, 2011. Winners will be notified by telephone.



Asian Quilt  
(approximately 55" x 75")

The August release of this study sparked a media storm centering on the risk of listening to high volume music delivered directly into listener's ear canals via iPods and MP3 players. A Kaiser Family Foundation Report released in January 2010 reported that the time youths spend on using personal entertainment technology has increased dramatically in the last five years—an average of 7.5 hours a day for individuals 8 to 18 years old, and the average increases to nearly eleven hours when media multitasking is taken into account.

We look to future studies to determine whether the increased use of MP3 players and iPods are a cause or merely part of a complex pattern leading to increased hearing loss. Currently, several national campaigns wisely encourage users to reduce presentation volumes in their entertainment technologies. Two popular programs are the American Speech Language Hearing Association's [www.listentoyourbuds.org](http://www.listentoyourbuds.org) and the American Academy of Audiology's [www.turnittotheleft.com](http://www.turnittotheleft.com).



Regardless of the age of the user, your audiologists encourage users of all ages to be frugal when setting volume in these devices. As you may have read previously, when nonusers can hear the sound of music while standing next to someone using an iPod or MP3 player, it is clear that the volume is in the "danger zone" of sound exposure. Turn it to the left and turn down the volume!

## Now Hear This!

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## Hearing Loss and Diabetes

As you may or may not know, diabetes mellitus is a group of metabolic disorders characterized by elevated blood sugar and abnormalities in insulin secretion and action. As a result of these abnormalities, carbohydrate, fat, and protein metabolism is altered and many nutrients stay in the bloodstream rather than being incorporated into cells as nourishment and structural components. Build-up of these substances can result in micro and macro vascular damage in the many vascular (blood) vessels in the body as well as organ system failure. Sadly, common adverse events in diabetics can include stroke, eye damage, heart attack, kidney failure, recurrent or recalcitrant infections, numbness, and vascular insufficiency.

The literature is limited regarding the effect of diabetes on hearing loss. However, knowledge of the anatomy and physiology of the ear suggests an obvious association. All parts of the cochlea (or inner ear) contain a rich network of vasculature (blood vessels) which are vulnerable to

the negative effects of prolonged elevated blood sugar. Renal (kidney) insufficiency can occur due to vascular (circulatory) pathologies associated with uncontrolled diabetes. Diabetes is

a well-known risk factor and poor prognostic indicator for sudden onset sensorineural hearing loss—or sudden hearing loss. Because of recurrent or resistant infections, malignant otitis externa (resistant and recurring infection of the ear canal) is commonly seen in people with diabetes. Studies stress the importance of compliance with diabetic treatment (i.e., following instructions for diet, medication, and treatment as outlined by your doctor or primary care provider). Be sure to report sudden changes in your hearing abilities to your doctor and to your audiologist.

