

A Lifestyle Guide to Hearing Health

# survival GUIDE

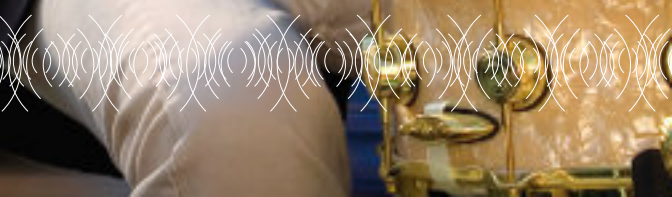


## Mick Fleetwood

Wants you to keep rockin'

**Pump Up the Fidelity**  
(not the volume)

**Protect Yourself—**  
Hearing Loss Prevention Tips





Over the years, I've been fortunate to have many hit records with my band Fleetwood Mac. One of my favorites is "Don't Stop"—which says, "Why not think about times to come/and not about the things that you've done." Those words can have many meanings to most baby boomers, including how we should think about our hearing health.

As a rock musician and a boomer myself, I know how important music is for those in my generation. That's why I'm proud to team up with Energizer, makers of the *Energizer® EZ Change®* battery dispenser, to embark on the second year of a massive campaign to educate people about hearing loss prevention and treatment. The *Energizer EZ Change* "It's Hip to Hear™" program provides practical ways to manage your hearing health without disrupting your lifestyle, so you can continue to "think about tomorrow" and keep rocking for years to come.

This year, Energizer has teamed up with the Rock and Roll Hall of Fame and Museum and continues its support of non-profit groups like the American Speech-Language-Hearing Association (ASHA).

Throughout this guide, you'll find profiles on new hearing technology and relevant tips on hearing loss prevention. You already know it's "hip to hear," but a few gentle reminders will help you listen responsibly.



### **Mick Fleetwood**

Rock Musician and National Spokesperson

2005 *Energizer EZ Change* "It's Hip to Hear" Program

# survival

## GUIDE

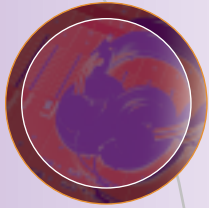


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Devices like the Apple iPod have brought “headphone hearing” back in vogue, but with the practical advantages of portable music come potential dangers.

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# Pump Up the Fidelity

(NOT THE VOLUME)

Devices like the Apple iPod have brought “headphone hearing” back in vogue, but with the practical advantages of portable music come potential dangers.

**I**n the late 1970s, music was evolving. The Motown sound was fading, replaced by disco, hard rock and punk. But it wasn't just the music that was changing; the way people listened to music evolved as well.

With the birth of the boombox, on-the-go music fans enjoyed the ability to blast their favorite tunes without being confined to their living rooms.

In 1979, Sony introduced the Walkman, allowing people to listen to their favorite songs as loud and proud as they wanted to—without the risk of being rude to their neighbors.

The Walkman was a culture-defining success and ushered in an age of personal music players. And if recent sales figures of devices like the Apple iPod are any indication, personal music players now are more popular than ever.

## Risk and Reward

Although there are several practical advantages to headphones, there are several dangers as well—including permanent hearing damage. Many users tend to pump up the volume much louder than they would if they were listening to music through conventional speakers. And because earphones broadcast powerful sound waves directly into the ear canal, there's a much greater potential for hearing loss.

Experts agree that a person should never turn the volume all the way up on any personal music player, as the sound can easily exceed 100 decibels (dB). Prolonged exposure to volume levels of this magnitude—as loud as a chain saw slicing through a tree—can lead to a condition called tinnitus.

**15% of college graduates have a level of hearing loss equal to or greater than their parents.**

—Hearing Alliance of America  
[www.hearingalliance.com/incidence.htm](http://www.hearingalliance.com/incidence.htm)

Tinnitus manifests itself as a severe ringing in the ears and can become a permanent condition.

Another type of hearing damage is sensorineural hearing loss, a condition marked by an inability to hear certain frequencies.

“The higher-register frequencies are the first to go,” said Pam Mason, director of Audiology Professional Practices at the American Speech-Language-Hearing Association (ASHA). She explains that a person with sensorineural hearing loss might be able to hear a bass guitar just fine, but struggle to make out the lyrics of a song.

One of the natural early warning signs for permanent hearing damage due to excessive noise, such as an extremely loud rock concert, is called temporary threshold shift (TTS).

“This is a sensation of muffled hearing, like having cotton stuffed in your ears. Your ears may also ring,” says Mason. “If you experience temporary threshold shift, it’s important

Continued on page 4

Which terms are **audiology/hearing terms**, and which ones are names of **music bands**?

- 1. Helix
- 2. Cochlea
- 3. Seasonal Affective Disorder
- 4. Temporary Threshold Shift
- 5. Bachman Turner Overdrive
- 6. Slack Mandible
- 7. Arch of Corti
- 8. Incus
- 9. Incubus
- 10. Autechre

**A = Hearing term**

**B = Band name**

**C = Both**

Continued from page 3

to give your ears enough quiet time to recover. If you don't, permanent hearing loss can occur."

Listening to earphones in a noisy environment, such as on a jet or in a gym, also can cause hearing damage. When listeners turn up the volume to hear over the background noise, they expose their ears to dangerous sound levels.

## Defending Against Hearing Loss

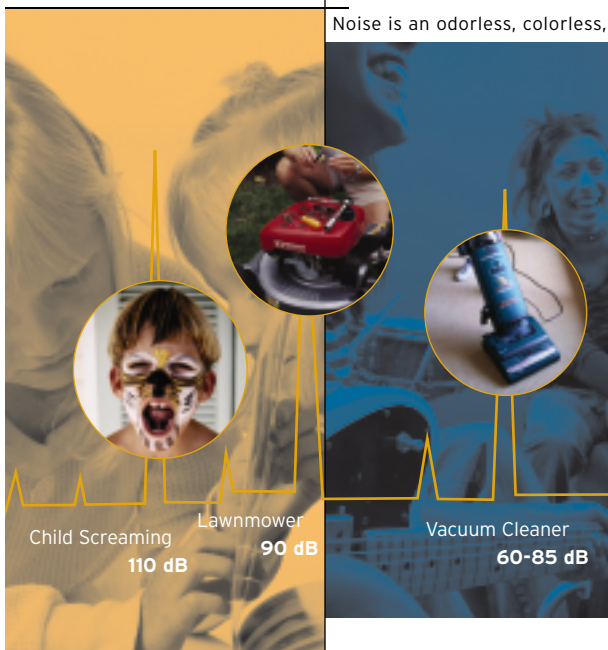
So how can people enjoy their portable music players and their music at safe levels, and still be able to enjoy every note of their favorite guitar solo?

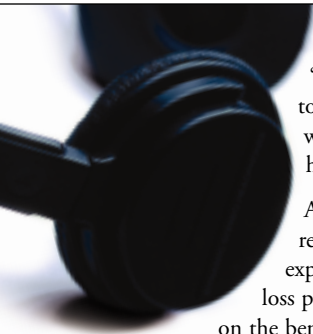
One answer is to pump up the "fidelity"—or quality of the sound—without twisting the volume knob. Adjusting the EQ settings of a music player to dial in the right mix of treble and bass frequencies can go a long way to ensure that every note is heard and every word is understood.

Mason also recommends eliminating as much background noise as possible by using high-quality earphones.

# HOW LOU

Noise is an odorless, colorless,





“By isolating what we want to hear, and blocking out what we don’t, we can protect our hearing,” said Mason.

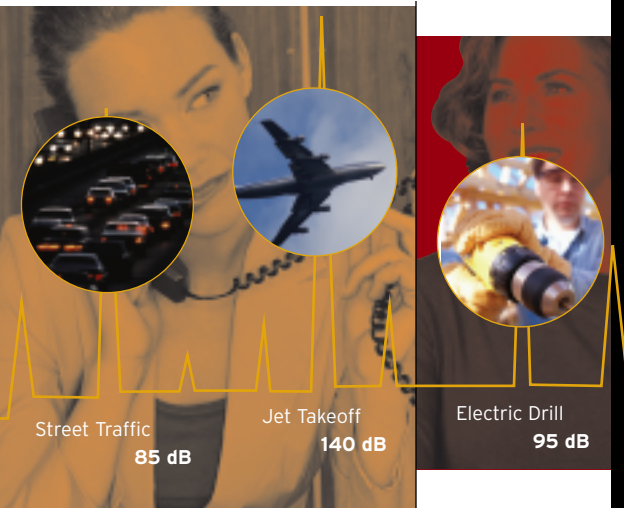
According to ASHA, much research is being done to explore new methods of hearing loss prevention, including studies on the benefits of antioxidants. But until the next big breakthrough arrives, people should do their best with precautionary measures to ensure they can “keep rocking” for years to come.

**More than 24 million people in the United States have a significant loss of hearing.**

—Hearing Alliance of America  
[www.hearingalliance.com/incidence.htm](http://www.hearingalliance.com/incidence.htm)

## **D** IS LIFE?

tasteless poison that can cause permanent hearing damage after a lifetime of exposure. Protect yourself against hazardous levels of 85 decibels (dB) or higher.



Introducing...

# the rock and roll hall of fame + museum



## Cleveland Rocks with some help from Energizer

Energizer is proud to team up with the Rock and Roll Hall of Fame and Museum to bring the "It's Hip to Hear" message to life through a unique program that appeals to music fans of all ages.

**T**his year, the Museum debuts two exhibits sponsored by Energizer. The first, based on the Energizer® EZ Change® "It's

Hip to Hear™" program, is an interactive kiosk called "Sound Check." It allows visitors to guess the lyrics of famously misunderstood songs, learn about the latest hearing technology and find out how to keep rocking for years to come.

The second exhibit is called "Listen to the Music: Rock and Roll and the Evolution of Audio Technology." It examines the development of consumer audio technology over the last century, its impact on the evolution of rock and roll and on the experience of *listening* to rock music.

"You need to preserve your hearing today so you can keep rocking for years to come."

—Mick Fleetwood



To promote responsible listening, Energizer and the Museum are also hosting a concert like no other. With help from modern technology and some promising musical talent, the event aims to make history with the “World’s Quietest Concert,” thanks to the power of Energizer® e<sup>2</sup>® Titanium Technology® and the *Energizer EZ Change*.

The Museum is proud to carry out its mission to educate people about the history and significance of rock and roll music through its efforts to collect, preserve, exhibit and interpret this art form for all who attend.

### Schedule of Events

Don't forget to visit the Rock and Roll Hall of Fame and Museum on your next trip to Cleveland to experience a variety of exhibits and concert events you won't want to miss.

Exhibit/Event	Dates
The Genius of Ray Charles	Now open through Sept. 5, 2005
Sound Check and Evolution exhibits	Now Open
Les Paul & the Electric Guitar The evolution of rock and roll would have been impossible without Paul's inventions.	Now Open
CMJ/Rock Hall Music Fest A three-day music festival brings 100 bands to venues all over Cleveland.	June 9 - 11, 2005
Summer in the City Concert Series Energizer sponsors six concerts outside on the Plaza stage.	Wednesdays throughout July and August 2005

Check back at [www.rockhall.com](http://www.rockhall.com) for complete, updated schedules throughout the year.

ROCK AND ROLL HALL OF FAME AND MUSEUM  
ONE KEY PLAZA



**Hearing loss** is the third leading chronic disability following arthritis and hypertension.

-Hearing Alliance of America  
[www.hearingalliance.com/incidence.htm](http://www.hearingalliance.com/incidence.htm)

## 1. Energizer® EZ Change®

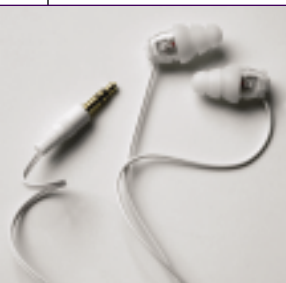
*Energizer EZ Change*, the world's only hearing aid battery dispenser, allows hearing aid users to insert their batteries precisely every time without having to handle the tiny batteries or tabs. [www.energizer.com/ezchange](http://www.energizer.com/ezchange).



## 2. ER•6i Isolator™

**Earphones** ER-6i Isolator Earphones are designed specifically for use with the Apple iPod and other small portable players, offering 8 decibels (dB) higher overall sensitivity and slightly more bass than the ER-6 Isolator Earphones.

[www.etymotic.com](http://www.etymotic.com).



## 3. Extech Digital Sound Level Monitor with Alarm

This digital sound level monitor provides continuous monitoring of area noise levels and alerts individuals when a pre-set limit has been exceeded. It can be mounted on a wall, desk or tripod for display convenience.

[www.extech.com/SL120](http://www.extech.com/SL120).





#### 4. Delphi XM MyFi™

The Delphi XM MyFi™ is the world's first personal XM satellite radio. The MyFi includes everything you need to enjoy XM anywhere—in the home, in the car and on the go. [www.delphi.com](http://www.delphi.com).



#### 5. Unisar TV Listener®

This cordless infrared headset system allows you to listen to your television or radio at your preferred volume without disturbing others. It is great for individuals who are hard of hearing—one person can listen at a different volume than others. [www.unisar.com](http://www.unisar.com).

#### 6. Oticon Syncro Hearing Aids

Oticon Syncro uses artificial intelligence to analyze and react to different sound environments—quickly and intuitively. It allows you to hear more of what you want to hear and less of what you don't—wherever you are, whatever you're doing.

[www.oticon.com](http://www.oticon.com).



**Approximately 40%**  
**of hearing impaired people**  
**are under the age of 65.**

—Hearing Alliance of America  
[www.hearingalliance.com/incidence.htm](http://www.hearingalliance.com/incidence.htm)

# DANGER

## LOUDEST PROFESSIONS



According to the U.S. Environmental Protection Agency (EPA), the following professions expose workers to hazardous noise levels at work. They include:

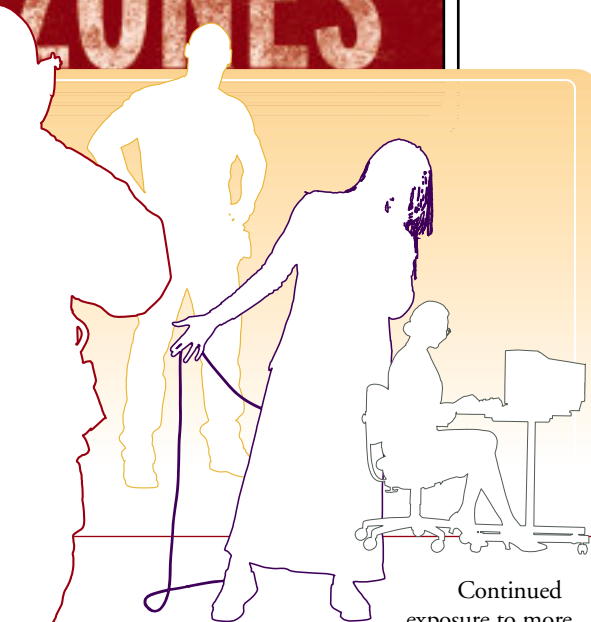
- |                         |                             |                                  |
|-------------------------|-----------------------------|----------------------------------|
| 1. Firefighters         | 8. Industrial arts teachers | 13. Cab, truck and bus operators |
| 2. Military personnel   | 9. Highway workers          |                                  |
| 3. Disc jockeys         | 10. Computer operators      |                                  |
| 4. Subway workers       | 11. Landscapers             |                                  |
| 5. Construction workers | 12. Factory workers         |                                  |
| 6. Musicians            |                             |                                  |
| 7. Farm workers         |                             |                                  |

Approximately 30 million workers are exposed to hazardous noise on the job.

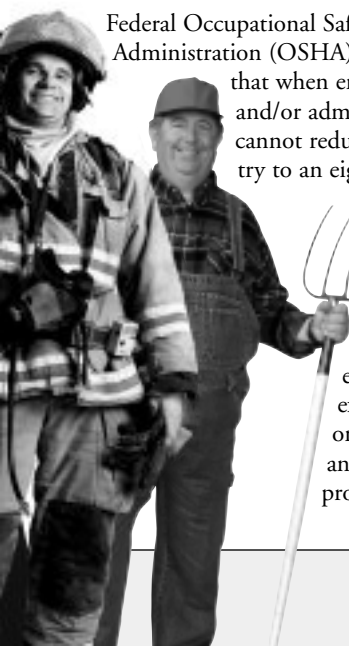
—National Institute of Occupational Safety and Health [www.cdc.gov/niosh/topics/noise](http://www.cdc.gov/niosh/topics/noise)



# ZONES



Continued exposure to more than 85 decibels (dB) of noise may cause gradual but permanent damage to hearing. Hearing loss is accelerated by louder noises. Noise can also hamper job performance, increase fatigue and cause irritability.



Federal Occupational Safety and Health Administration (OSHA) regulations require that when engineering controls and/or administrative controls cannot reduce noise levels in industry to an eight-hour time-weighted average (TWA) level of less than 85 dB, a hearing protection (or conservation) program must be established. If you are exposed to loud noise on the job, speak up and do something to protect your hearing!

# Protect Yourself from Noise—

## Hearing Loss Prevention Tips

The key word in dealing with noise is *prevention!* Here are some helpful tips from ASHA (American Speech-Language-Hearing Association) to keep in mind.

- ))) **Wear noise-canceling headphones or ear plugs** when exposed to any potentially damaging noise at work, in the community (heavy traffic, concerts, hunting, etc.) or at home (mowing the lawn, snow blowing the driveway). This protection can be found at drug stores, sporting goods stores or can be custom-made.
- ))) **Limit periods of exposure to noise.** Don't sit next to the speakers at concerts, clubs or auditoriums. If you are at a rock concert, walk out for a while to give your ears a break!
- ))) **Pump down the volume!** When using stereo headsets or listening to music in the car, turn down the volume. Remember: if a friend can hear the music from your headset when standing three feet away, the volume is definitely too high.
- ))) **Be a responsible consumer.** Look for a noise rating when buying recreational equipment, children's toys, household appliances, and power tools. Choose quieter models, especially for equipment you use often, like a hair dryer. If there is no noise rating, ask the manufacturer for one.
- ))) **Inspect your child's toys** for noise danger just as you do for small parts that can cause choking. Remember, too, that children tend to hold toys close to their ears which can pose additional threat for hearing damage.

**Be an advocate!** Remember there are no regulations governing how loud sound can be in public places such as discos, movie theaters, dance clubs or exercise centers. Work with owners, managers and community leaders to create a healthier, less noxious listening environment.

For more tips or information on finding an ASHA-certified audiologist in your area, go to [www.asha.org](http://www.asha.org).

# It's Hip to Hear with the *Energizer* *EZ Change*.



The *Energizer*® *EZ Change*® is the only hearing aid battery dispenser innovation in more than 30 years. The advanced design holds the battery in place and eliminates the need to handle hearing aid batteries and tabs. The all-in-one dispenser system works with most hearing aids.

Join the thousands who are already enjoying the convenience of the *Energizer EZ Change* battery dispenser. It helps change batteries and lives.



**Turn**



**Push**



**Insert**

**OFFICIAL MAIL-IN CERTIFICATE**

**VALID THRU 1/31/06**

Save \$5.00 (with purchase, by mail) on two (2) *Energizer*® *EZ Change*® (any size)

To receive your \$5 rebate by mail, please complete and mail this certificate along with two (2) original *Energizer*® *EZ Change*® package tops (sizes: 10, 13, 312 or 675).

MAIL TO:

***Energizer EZ Change***

**"It's Hip to Hear" Offer**

**P.O. Box 5457, Dept. 1379-23**

**Young America, MN 55558-5457**

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

(Required)

Limit one (1) rebate per official certificate. Limit one (1) rebate per household or address. This certificate must accompany your request. NO DUPLICATION OR REPRODUCTION OF THIS CERTIFICATE OR UPC SYMBOLS WILL BE ACCEPTED. No certificates submitted by groups or organizations will be honored. Allow eight (8) weeks for shipment. Offer good for residents of USA only. Requests without zip codes cannot be honored. Offer rights not transferable. Not valid in combination with any other offers. Fraudulent submission could result in federal prosecution under mail fraud statutes. Void where prohibited, licensed, taxed, or restricted by law. Request void if check is not cashed within ninety (90) days of check date. Requests must be received by 1/31/06. OFFER ENDS 1/31/06. Cash value 1/20¢.



# It's Hip to Hear

Hearing health is crucial to the enjoyment and quality of life. Remember to get your hearing tested by a physician or an audiologist as early as age 30. And, encourage your friends and family to do the same. To protect your hearing, make sure to wear protective hearing devices so you can continue to enjoy the music. For more information, visit [www.asha.org](http://www.asha.org) or [www.energizer.com](http://www.energizer.com).

Energizer® EZ Change® is proud to support various industry organizations to educate people about hearing loss and its causes through grass-roots advocacy and the hearing industry. Energizer supports these non-profit organizations: ASHA (American Speech-Language-Hearing Association) and the Rock and Roll Hall of Fame and Museum, to bring you this valuable information on hearing health.

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(Any size)

