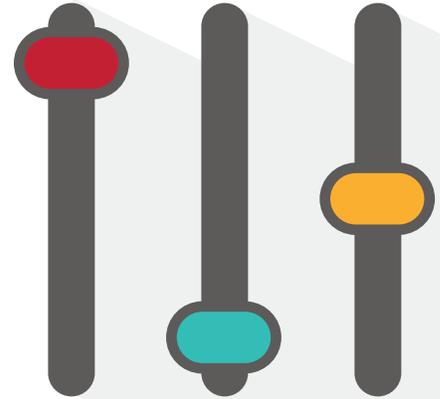




BetterSafe

WELCOA'S ONLINE BULLETIN FOR YOUR FAMILY'S SAFETY

Listen Up! NOISES CAN DAMAGE YOUR HEARING



Sounds surround us. We enjoy many of them—like music, birdsong, and conversations with friends. But loud or long-lasting noises—from motors, power tools, and even headphones—can permanently damage your hearing. Take steps to protect your ears from harmful noises.

Loud noise is one of the most common causes of hearing loss. An estimated 26 million Americans between the ages of 20 and 69 already have irreversible hearing loss caused by loud sounds. And up to 16% of teens have hearing loss that may have been caused by loud noise.

“Noise damage can begin at any age, and it tends to accumulate over time. That’s why avoiding excess noise is so critical,” says Dr. Gordon Hughes, a clinical trials director and ear, nose, and throat specialist at the National Institutes of Health (NIH).

“Hearing loss caused by noise is completely preventable.”

Common Culprits

For adolescents, music players with headphones are a common source of noise exposure. “With adults it may be power tools, lawn mowers, snow blowers, and other sources of that type,” Hughes says. “Workplace noise—like farm machinery, construction, and noises associated with military service—may also cause problems.”

Noise-related hearing loss can arise from extremely loud bursts of sound, such as gunshots or explosions, which can rupture the eardrum or damage the bones in the middle ear. This kind of hearing loss can be immediate and permanent.

Next Page
↓



26 MILLION AMERICANS

BETWEEN THE AGES OF
20 AND 60 ALREADY
HAVE IRREVERSIBLE
HEARING LOSS CAUSED
BY LOUD NOISE.



BetterSafe

WELCOA'S ONLINE BULLETIN FOR YOUR FAMILY'S SAFETY

Continued from previous page

But most noise-related hearing problems develop slowly over time, with ongoing exposure to loud sounds. Loud noises can injure the delicate sensory cells—known as hair cells—in the inner ear. “These cells have little hair-like tufts on one side,” Hughes says.

Hair cells help to convert sound vibrations into electrical signals that travel along nerves from the ear to the brain. These cells allow us to detect sounds. But when hair cells are damaged and then destroyed by too much noise, they don't grow back. So hearing is permanently harmed.

Sometimes loud noises can cause tinnitus—ringing in the ears that lasts anywhere from a brief period to a lifetime. Loud noises can also cause temporary hearing loss that goes away within hours or a couple of days. “But some research suggests that even though the symptoms disappear, there may be molecular or chemical abnormalities that build up and cause potential for long-term damage to hearing,” Hughes says.

It's best to avoid loud noises when possible. But how loud is too loud?

Sound is measured in units called decibels (dB). Sounds less than 75 dB are unlikely to harm hearing. Normal conversation, for instance, measures about 60 dB. A typical hair blow dryer has an intensity of about 85 dB, but if they're used for just brief periods, they're unlikely to damage hearing.

However, long or repeated exposure to sounds at or above 85 dB can cause problems. The louder the sound, the quicker the damage.

“At maximum volume, an audio player with ear buds might produce 105 dB. There's potential for noise damage to occur at barely 30 minutes of exposure,” Hughes says. A siren may be 120 dB, a rock concert 110 dB, a motorcycle 95 dB, and a lawn mower 90 dB. All these have the potential to harm hearing over time.

“Wear ear protection such as ear plugs if the sound can't be avoided. Or just get away from the sound, or reduce it, like turning down the volume on an audio player,” Hughes says. Foam insert earplugs can keep some sound intensity from reaching the eardrum, as can protective earmuffs, available at hardware and sport stores. For better ear protection, talk with a hearing specialist about getting a custom-fitted ear mold.

Finally, don't forget to protect the ears of children who are too young to protect their own. And get a hearing test if you think you or a loved one might have hearing loss.

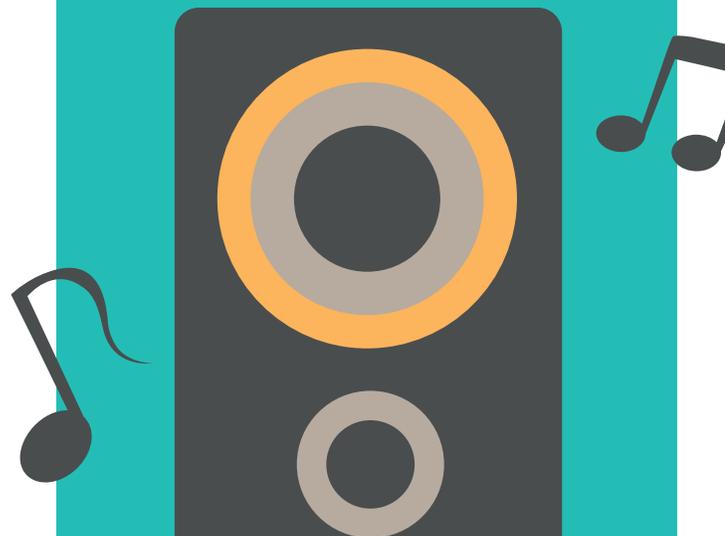
It's a Noisy Planet: Protect Your Hearing

Your ears can be your warning system.
Noise is too loud when:

- You have to raise your voice to be understood by someone standing nearby.
- The noise hurts your ears.
- You've got a buzzing or ringing in your ears, even temporarily.
- You don't hear as well as you normally do until several hours after you get away from the noise.

If you're around noises at this level:

- Turn down the sound.
- Avoid the noise (walk away).
- Block the noise (wear earplugs or earmuffs).





Osteoporosis in Aging

Protect Your Bones with Exercise

As we get older, we begin to lose more bone than we build. The tiny holes within bones get bigger, and the solid outer layer becomes thinner. In other words, our bones get less dense. Hard bones turn spongy, and spongy bones turn spongier. If this loss of bone density goes too far, it's called osteoporosis. Over 10 million people nationwide are estimated to have osteoporosis.

It's normal for bones to break in bad accidents. But if your bones are dense enough, they should be able to stand up to most falls. Bones weakened by osteoporosis, though, are more likely to break.

"It's just like any other engineering material," says Dr. Joan McGowan, a National Institutes of Health (NIH) expert on osteoporosis. If you fall and slam your weight onto a fragile bone, it reaches a point where the structures aren't adequate to support the weight you're putting on them. If the bone breaks, it's a major hint that an older person has osteoporosis.

Broken bones can lead to serious problems for seniors. The hip is a common site for

osteoporosis, and hip fractures can lead to a downward spiral of disability and loss of independence. Osteoporosis is also common in the wrist and the spine.

The hormone estrogen helps to make and rebuild bones. A woman's estrogen levels drop after menopause, and bone loss speeds up. That's why osteoporosis is most common among older women. But men get osteoporosis, too.

Experts suggest that women start getting screened for osteoporosis at age 65. Women younger than age 65 who are at high risk for fractures should also be screened. Men should discuss screening recommendations with their health care providers.

Screening is done with a bone mineral density test at the hip and spine. The most common test is known as DXA, for dual-energy X-ray absorptiometry. It's painless, like having an X-ray. Your results are often reported as a T-score, which compares your bone density to that of a healthy young woman. A T-score of -2.5 or lower indicates osteoporosis.



OVER
10 MILLION
PEOPLE NATIONWIDE
ARE ESTIMATED
TO HAVE
OSTEOPOROSIS



Next Page
↓



Day In Day Out

WELCOA'S ONLINE BULLETIN FOR YOUR LIFESTYLE

Continued from previous page

Lower Your Risk

There's a lot you can do to lower your risk of osteoporosis. Getting plenty of calcium, vitamin D, and exercise is a good start.

Calcium is a mineral that helps bones stay strong. It can come from the foods you eat—including milk and milk products, dark green leafy vegetables like kale and collard greens—or from dietary supplements. Women over age 50 need

1,200 mg of calcium a day. Men need 1,000 mg a day from ages 51 to 70 and 1,200 mg a day after that.

Vitamin D helps your body absorb calcium. As you grow older, your body needs more vitamin D, which is made by your skin when you're in the sun. You can also get vitamin D from dietary supplements and from certain foods, such as milk, eggs, fatty fish, and fortified cereals. Talk with your health care provider to make sure you're getting a healthy amount of vitamin D. Problems can arise if you're getting too little or too much.

Exercise, especially weight-bearing exercise, helps bones, too. Weight-bearing exercises include jogging, walking, tennis, and dancing. The pull of muscles is a reminder to the cells in your bones that they need to keep the tissue dense.

Smoking, in contrast, weakens bones. Heavy drinking does too—and makes people more likely to fall. Certain drugs may also increase the risk of osteoporosis. Having family members with osteoporosis can raise your risk for the condition as well.

The good news is, even if you already have osteoporosis, it's not too late to start taking care of your bones.

Since your bones are rebuilding themselves all the time, you can help push the balance toward more bone growth by giving them exercise, calcium, and vitamin D.

Several medications can also help fight bone loss. The most widely used are bisphosphonates. These drugs are generally prescribed to people diagnosed with osteoporosis after a DXA test, or to those who've had a fracture that suggests their bones are too weak.

Bisphosphonates have been tested more thoroughly in women, but are approved for men too.

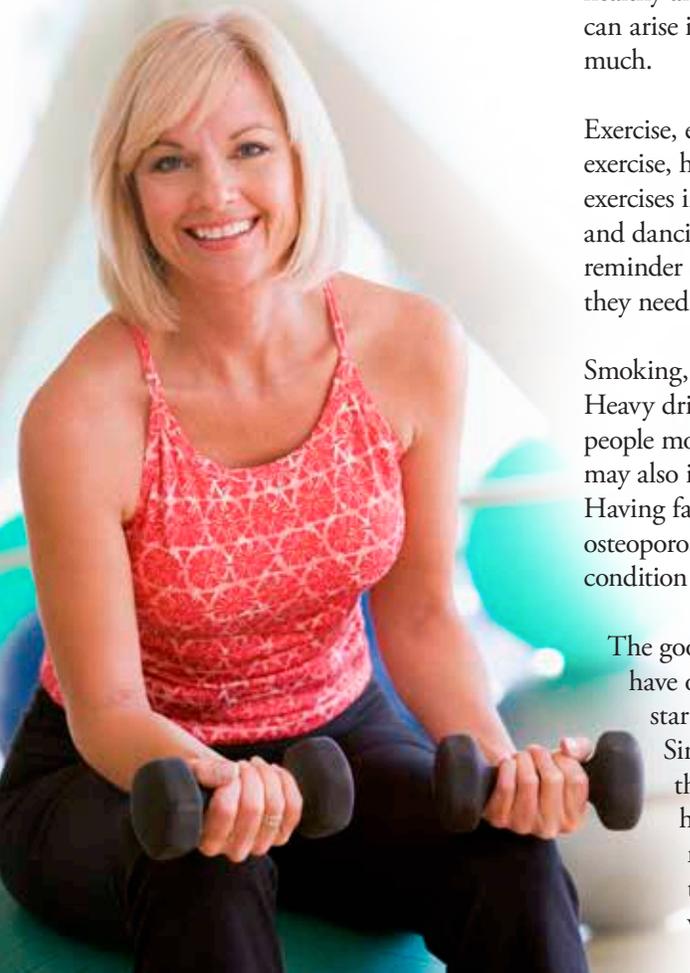
Prevent Falls To Protect Bones

TO PREVENT FALLS AT HOME:

- Keep rooms free of clutter, especially on floors.
- Don't walk in socks, stockings, or slippers.
- Be sure rugs have skid-proof backs or are tacked to the floor.
- Keep a flashlight next to your bed to guide you in the dark.

EXERCISES TO IMPROVE BALANCE:

- Stand on one leg at a time for a minute. Slowly increase the time. Try to balance with your eyes closed or without holding on.
- Stand on your toes for a count of 10, and then rock back on your heels for a count of 10.
- Move your hips in a big circle to the left, and then to the right. Do not move your shoulders or feet. Repeat 5 times.





TakeCharge

WELCOA'S ONLINE SELF-CARE BULLETIN

An Itchy Subject: A Look at Eczema

Atopic dermatitis, also known as eczema, is a non-contagious inflammatory skin condition that affects an estimated 30 percent of the U.S. population, mostly children and adolescents. It is a chronic disease characterized by dry, itchy skin that can weep clear fluid when scratched. People with eczema also may be particularly susceptible to bacterial, viral, and fungal skin infections.

Researchers estimate that 65 percent of people with atopic dermatitis develop symptoms during the first year of life, sometimes as early as age 2 to 6 months, and 85 percent develop symptoms before the age of 5. Many people outgrow the disease by early adulthood.

What Are the Causes?

The cause of atopic dermatitis is unknown, but a combination of genetic and environmental factors appears to be involved. The condition often is associated with other allergic diseases such as asthma, hay fever, and food allergy. Children whose parents have asthma and allergies are more likely to develop atopic dermatitis than children of parents without allergic diseases. Approximately 30 percent of children with atopic dermatitis have food allergies, and many develop asthma or respiratory allergies. People who live in cities or drier climates also appear more likely to develop the disease.

The condition tends to worsen when a person is exposed to certain triggers, such as:

- Pollen, mold, dust mites, animals, and certain foods (for allergic individuals)
- Cold and dry air
- Colds or the flu
- Skin contact with irritating chemicals
- Skin contact with rough materials such as wool
- Emotional factors such as stress
- Fragrances or dyes added to skin lotions or soaps.

Taking too many baths or showers and not moisturizing the skin properly afterward may also make eczema worse.

Next Page
↓



Atopic dermatitis, also known as eczema, is a non-contagious inflammatory skin condition that affects an estimated **30 percent of the U.S. population**, mostly children and adolescents.



TakeCharge

WELCOA'S ONLINE SELF-CARE BULLETIN

Continued from previous page

Symptoms

Atopic dermatitis is characterized by red and itchy dry skin. Itching may start before the rash appears and sometimes can be intense. Persistent scratching of itchy skin can lead to redness, swelling, cracking, weeping of clear fluid, crusting, and scaling.

Both the type of rash and where the rash appears depend on a person's age.

- Infants as young as 6 to 12 weeks develop a scaly rash on their face and chin. As they begin to crawl and move about, other exposed areas may be affected.
- In childhood, the rash begins with bumps that become hard and scaly when scratched. It occurs behind the knees; inside the elbows; on the wrists, ankles, and hands; on the sides of the neck; and around the mouth. Constant licking of the lips can cause small, painful cracks in the skin.
- In some children, the disease goes into remission for a long time, only to come back at the onset of puberty when hormones, stress, and the use of irritating skin care products or cosmetics may cause the disease to flare.
- Some people develop atopic dermatitis for the first time as adults. The rash is more commonly seen on the insides of the knees and elbows, as well as on the neck, hands, and feet. The symptoms can be localized or widespread throughout the body.
- During a severe flare-up, rashes may occur anywhere on the body.

Diagnosis

If your doctor suspects that you have atopic dermatitis, he or she may

- Perform a physical exam and specifically inspect the appearance of the skin.
- Take a personal and family history.
- Perform a skin biopsy (the removal of a small piece of skin for examination) to confirm the diagnosis or to rule out other causes of dry, itchy skin.
- Perform allergy skin testing, which may be helpful for individuals with hard-to-treat atopic dermatitis or who have symptoms of other allergic diseases.





To Your Health

WELCOA'S ONLINE GENERAL WELLNESS BULLETIN

A Look at Alzheimer's

Alzheimer's disease is an irreversible, progressive brain disease that slowly destroys memory and thinking skills and, eventually even the ability to carry out the simplest tasks of daily living. In most people with Alzheimer's, symptoms first appear after age 65. Alzheimer's disease is the most common cause of dementia among older people.

The disease is named after Dr. Alois Alzheimer. In 1906, Dr. Alzheimer noticed changes in the brain tissue of a woman who had died of an unusual mental illness. Her symptoms included memory loss, language problems, and unpredictable behavior. After she died, he examined her brain and found many abnormal clumps (now called amyloid plaques) and tangled bundles of fibers (now called neurofibrillary tangles).

Plaques and tangles in the brain are two of the main features of Alzheimer's disease. The third is the loss of connections between nerve cells (neurons) in the brain.

Although treatment can help manage symptoms in some people, currently there is no cure for this devastating disease.

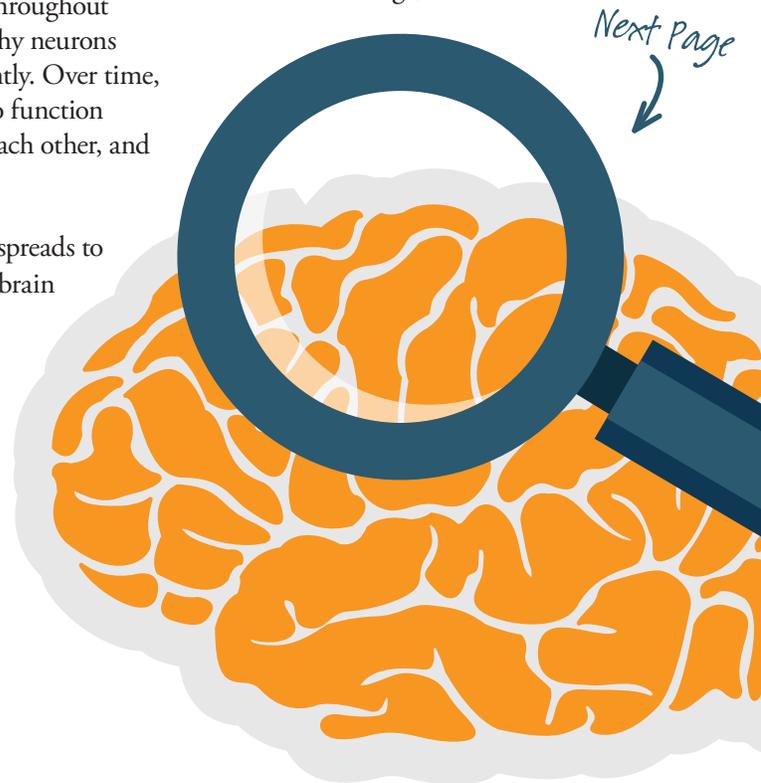
What happens to the brain in Alzheimer's disease?

Although we still don't know how the Alzheimer's disease process begins, it seems likely that damage to the brain starts a decade or more before problems become evident. During the preclinical stage of Alzheimer's disease, people are free of symptoms, but toxic changes are taking place in the brain. Abnormal deposits of proteins form amyloid plaques and tau tangles throughout the brain, and once-healthy neurons begin to work less efficiently. Over time, neurons lose the ability to function and communicate with each other, and eventually they die.

Before long, the damage spreads to a nearby structure in the brain called the hippocampus, which is essential in forming memories. As more neurons die, affected brain regions begin to shrink. By the final stage of Alzheimer's, damage is widespread, and brain tissue has shrunk significantly.

How many Americans have Alzheimer's disease?

Estimates vary, but experts suggest that as many as 5 million Americans age 65 and older have Alzheimer's disease. Unless the disease can be effectively treated or prevented, the number of people with it will increase significantly if current population trends continue. That's because the risk of Alzheimer's increases with age, and the U.S.





To Your Health

WELCOA'S ONLINE GENERAL WELLNESS BULLETIN

Continued from previous page



The strongest evidence so far suggests that you may be able to **lower your risk** of Alzheimer's disease by **reducing your risk of heart disease**.

population is aging. The number of people with Alzheimer's doubles for every 5-year interval beyond age 65.

How long can a person live with Alzheimer's disease?

Alzheimer's is a slow disease that progresses in three stages—an early, preclinical stage with no symptoms, a middle stage of mild cognitive impairment, and a final stage of Alzheimer's dementia. The time from diagnosis to death varies—as little as 3 or 4 years if the person is older than 80 when diagnosed to as long as 10 or more years if the person is younger.

Right now, there's no proven way to prevent Alzheimer's disease. Research into prevention strategies is ongoing. The strongest evidence so far suggests that you may be able to lower your risk of Alzheimer's disease by reducing your risk of heart disease.

What is dementia?

Dementia is the loss of cognitive functioning—thinking, remembering, and reasoning—and behavioral abilities to such an extent that it interferes with a person's daily life and activities. Dementia ranges in severity from the mildest stage, when it is just beginning to affect a person's functioning, to the most severe stage, when the person must depend completely on others for basic activities of daily living.

Many conditions and diseases cause dementia. Two of the most common causes of dementia in older people are Alzheimer's disease and *vascular dementia*, which is caused by a series of strokes or changes in the brain's blood supply.

Other conditions that may cause memory loss or dementia include:

- medication side effects
- chronic alcoholism
- tumors or infections in the brain
- blood clots in the brain
- vitamin B12 deficiency
- some thyroid, kidney, or liver disorders

Many of these conditions are temporary and reversible, but they can be serious and should be treated by a doctor as soon as possible.

Emotional problems, such as stress, anxiety, or depression, can make a person more forgetful and can be mistaken for dementia. For instance, someone who has recently retired or who is coping with the death of a spouse may feel sad, lonely, worried, or bored. Trying to deal with these life changes leaves some people confused or forgetful. The emotional problems can be eased by supportive friends and family, but if these feelings last for a long time, it is important to get help from a doctor or counselor.