CONDITION

Tinnitus

Tinnitus is hearing ringing, buzzing, or another sound without an outside source.

WHAT IT IS
Hearing sound without an outside source

BODY SYSTEM
Hearing and nervous system

MAIN SYMPTOMS
Ringing, buzzing, humming, pulsing sounds

WHAT CAUSES IT
Hearing changes, medical conditions, or unknown causes

HOW IT IS DIAGNOSED
Symptom history, ear examination, and hearing tests

MAIN TREATMENT
Hearing support, sound therapy, and psychological therapies

CAN IT BE CURED?
Sometimes - when a treatable cause is corrected

IS IT AN EMERGENCY?
Sometimes - with sudden hearing loss or stroke symptoms

LONG-TERM OUTLOOK
Often manageable, though symptoms may continue

Overview

Tinnitus is the experience of hearing a sound that does not come from an outside source. People often describe ringing, but tinnitus can also sound like buzzing, humming, hissing, clicking, or whooshing. It may be heard in one ear, both ears, or inside the head.

Tinnitus is a condition rather than a disease. It can occur on its own, but it is often linked with hearing loss or another change in the hearing system. The sound is real to the person experiencing it, even though other people usually cannot hear it.

For some people, tinnitus is brief or easy to ignore. For others, it affects sleep, concentration, mood, or everyday activities. Its loudness does not always match its impact: a relatively quiet sound may still feel intrusive.

Tinnitus that follows the heartbeat is called pulsatile tinnitus . Because it can be linked to blood

flow near the ear, it needs medical assessment even when it is not painful.

Symptoms

Tinnitus sounds differ from person to person. The sound may be constant or come and go. It can stay at one pitch or change over time.

Common descriptions include:

Some people can change the sound temporarily by moving their jaw, head, or neck. This may suggest that signals from muscles or joints are influencing the hearing system.

Tinnitus may occur with reduced hearing, sound sensitivity, dizziness, ear pressure, or ear pain. These symptoms can help identify an underlying cause, but many people have tinnitus without other obvious ear symptoms.

Occasionally, tinnitus takes the form of music or voices without an outside source. This does not automatically mean a mental health condition is present. Musical tinnitus can occur with hearing loss and should be discussed with a healthcare professional.

- Ringing, buzzing, humming, hissing, or whistling
- Clicking, roaring, musical tones, or several sounds together
- Whooshing or throbbing in time with the heartbeat
- Sound that seems louder in quiet places or at bedtime

Causes and risk factors

Tinnitus often begins when the hearing system changes. Reduced sound input from the ear may lead the brain to adjust how it processes sound, making internal nerve activity more noticeable. The exact mechanism is complex, and no single explanation covers every case.

Common associations include age-related hearing loss and damage from loud noise. A single very loud sound or repeated exposure to machinery, concerts, firearms, or high-volume headphones can affect hearing and trigger tinnitus.

Other possible causes include:

Medicines linked with tinnitus include some antibiotics like amoxicillin or doxycycline , cancer treatments, water tablets like furosemide or hydrochlorothiazide called diuretics, and high doses of certain pain relievers. The risk can depend on the medicine and dose. Do not stop a prescribed medicine without medical advice.

Tinnitus in one ear can sometimes relate to a problem affecting that ear or its hearing nerve. Serious causes are uncommon, but persistent one-sided tinnitus usually needs assessment.

In many cases, no single cause is found. This does not mean the symptom is imagined or that nothing can be done to reduce its impact.

- Earwax blocking the ear canal
- An ear infection or fluid behind the eardrum
- Ménière's disease, an inner-ear condition that can also cause vertigo
- Jaw-joint or neck problems
- A head or neck injury
- Certain medicines that can affect the ear
- Blood-vessel changes associated with pulsatile tinnitus

Diagnosis

There is no blood test that confirms tinnitus. Diagnosis begins with a description of what you hear, when it started, whether it affects one or both ears, and whether it follows your heartbeat.

A healthcare professional may ask about hearing changes, noise exposure, medicines, dizziness, pain, sleep, and the effect on your mood and daily life. They may examine the ear canal and eardrum to look for earwax, infection, or other visible problems.

A hearing assessment, also called audiometry , measures how well you hear sounds at different pitches and volumes. It may identify hearing loss even if you have not noticed it. Other ear tests may check eardrum movement and middle-ear function.

Scans are not routinely needed for tinnitus in both ears when there are no concerning findings. MRI, CT, or blood-vessel imaging may be considered for pulsatile tinnitus, persistent tinnitus in one ear, unequal hearing loss, or neurological symptoms. The choice depends on the suspected cause.

A clinician may also use a questionnaire to understand how tinnitus affects sleep, concentration, emotions, and daily activities. This helps guide support; it does not measure whether the tinnitus is "real."

Treatment and management

Treatment begins with addressing any cause that can be corrected. Removing impacted earwax or treating an ear infection may reduce tinnitus when that problem is responsible. If a medicine may be contributing, a prescriber can review its benefits, risks, and possible alternatives.

Hearing aids can help when tinnitus occurs with hearing loss. By making outside sounds easier to hear, they may make tinnitus less noticeable and reduce listening effort.

Sound enrichment adds gentle background sound rather than trying to drown tinnitus out completely. Options include a fan, quiet music, natural sounds, or a bedside sound device. Some hearing aids also include sound-generating features. Evidence for particular sound-therapy devices is mixed, so the choice should reflect comfort and personal preference.

Cognitive behavioural therapy , or CBT, helps change unhelpful reactions to tinnitus. It does not claim that the sound is imaginary. Instead, it can reduce distress, improve coping, and lessen the effect on daily life. CBT may be provided individually, in groups, or through a structured digital program.

Tinnitus retraining therapy combines education with sound therapy. Some people find it useful, but results are not consistent, and it may require a long course of treatment.

Sleep support, relaxation skills, and treatment for anxiety or depression can also improve quality of life. These treatments address the effects of tinnitus rather than dismissing the sound.

There is no medicine proven to remove ongoing tinnitus for everyone. Medicines may still be used for a related condition, such as depression, anxiety, migraine, or a sleep disorder. Vitamins, herbal products, and supplements are often marketed for tinnitus, but good evidence of benefit is lacking. Some can cause side effects or interact with medicines.

Complications

Persistent tinnitus can interfere with sleep, attention, work, and enjoyment of quiet activities. It may contribute to irritability, anxiety, low mood, or social withdrawal. Tiredness and stress can then make the sound feel more intrusive, creating a difficult cycle.

Tinnitus itself does not usually cause hearing loss. However, both may result from the same underlying change in the ear.

Severe distress deserves support. Thoughts of self-harm or feeling unable to stay safe are an emergency, whether or not tinnitus is the main cause.

Prevention

Not every case of tinnitus can be prevented. It may develop with age-related hearing changes, illness, injury, or no identifiable cause.

Protecting your hearing can lower the risk from excessive noise. Use well-fitting hearing protection around loud tools, machinery, firearms, or amplified music. Move away from loud speakers when possible, take listening breaks, and keep personal audio at a comfortable level.

Hearing protection should reduce harmful noise without creating unnecessary silence. Wearing earplugs throughout ordinary daily life can increase sound sensitivity for some people.

Use medicines as directed and ask about hearing-related risks if you are prescribed a medicine known to affect the ear. Do not reduce or stop an important treatment on your own.

Living with it and what to expect

Tinnitus may fade after a temporary cause settles, but it can also continue for months or years. Its volume and character may change from day to day. Stress, tiredness, illness, and quiet surroundings can make it more noticeable without necessarily meaning that the hearing system has worsened.

Many people gradually become less aware of tinnitus. This process is called habituation , meaning the brain learns to treat the sound as unimportant. Habituation does not require the sound to disappear, and there is no fixed timetable.

Regular sleep habits, meaningful activity, moderate background sound, and hearing support can make daily life easier. Complete silence often brings tinnitus into focus, especially at night.

Arrange routine follow-up if the sound changes, treatment is not helping, or tinnitus continues to affect sleep, mood, relationships, study, or work. Ongoing support can be adjusted as your needs change.

When to get medical help

Seek emergency help if tinnitus occurs with signs of a stroke, such as facial drooping, arm weakness, difficulty speaking, sudden severe imbalance, or a new severe headache. Emergency care is also needed after a serious head injury or if you feel at risk of harming yourself.

Seek same-day urgent medical assessment for tinnitus with sudden hearing loss, especially if hearing changed over hours or a few days. Early assessment matters because some causes of sudden hearing loss need prompt treatment.

Arrange a medical appointment soon if:

Brief, mild tinnitus after noise exposure may settle, but repeated episodes can signal harmful sound levels. A hearing check is sensible if symptoms continue or recur.

- The sound beats in time with your pulse
- Tinnitus remains mainly or entirely in one ear
- You have new or worsening hearing loss
- You also have persistent vertigo, ear discharge, or significant ear pain
- The sound began after starting or changing a medicine
- It is disrupting sleep, concentration, mood, or everyday life

Common questions

Will tinnitus go away on its own?

Sometimes. Tinnitus caused by temporary noise exposure, earwax, or an infection may improve as the cause settles. Persistent tinnitus may not disappear completely, but it can become quieter or much less intrusive over time.

Does tinnitus mean I am losing my hearing?

Not always. Tinnitus commonly occurs with hearing loss, including hearing changes that are not obvious in daily life. A hearing test can show whether hearing loss is present. Tinnitus itself does not usually damage hearing.

Can earwax cause tinnitus?

Yes. Impacted earwax can block sound and trigger or worsen tinnitus. A healthcare professional can check the ear safely. Avoid putting objects into the ear canal, as this can push wax deeper or injure the ear.

Is tinnitus a sign of a brain tumour?

Usually not. Rarely, one-sided tinnitus with unequal hearing loss can be linked to a growth affecting the hearing nerve. Persistent tinnitus in one ear should be assessed, but most people with tinnitus do not have a tumour.

How can I make tinnitus quieter at night?

Gentle background sound may reduce the contrast between tinnitus and a silent room. A fan, quiet audio, or bedside sound device may help. A regular bedtime routine and treatment for ongoing insomnia can also reduce its impact.

Does caffeine make tinnitus worse?

Caffeine affects people differently. Routine caffeine avoidance has not been shown to help everyone with tinnitus. If you notice a consistent link, you can discuss a gradual reduction with a healthcare professional. Sudden withdrawal may cause headaches or other symptoms.

Sources

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