

Patient information from the BMJ Group

Tinnitus

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Tinnitus

Having tinnitus can be distressing. There's usually no cure for tinnitus but there may be things you can do to help you cope.

We've brought together the best research about tinnitus and weighed up the evidence about how to treat it. You can use our information to talk to your doctor and decide which treatments are best for you.

What is tinnitus?

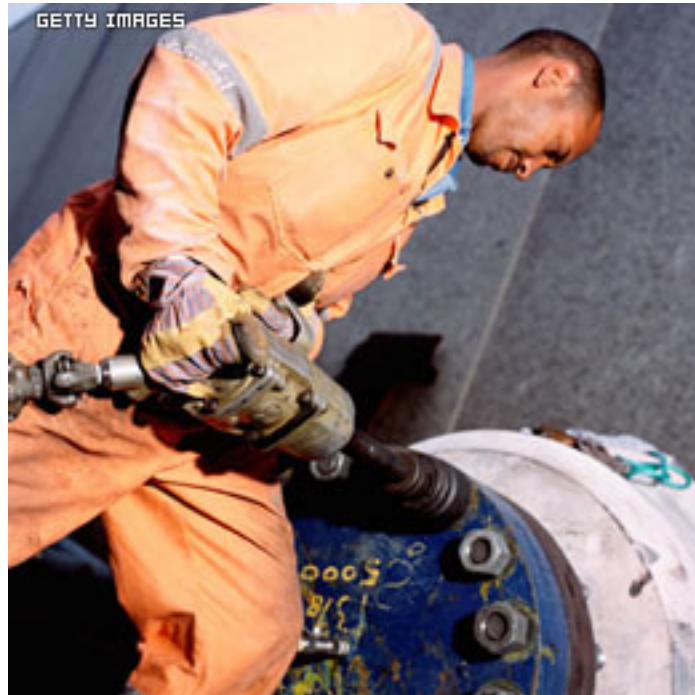
If you have tinnitus, you hear ringing or another sound in your ears most of the time.

Usually, you hear the sounds in both ears. These sounds don't come from the outside. And they don't come from inside your body (the sounds aren't from your heartbeat, for example).

For many people, there isn't an obvious cause of their tinnitus. But sometimes doctors can find a cause. Some things that can cause tinnitus are: ^[1]

- Hearing loss. If you've lost some of your hearing, this can cause tinnitus
- Too much loud noise over a long period. This could be from things like loud music or machinery. You can also get tinnitus after hearing a loud explosion
- Some medicines. Some aspirin-type drugs, **antibiotics**, **diuretics**, and drugs for cancer can cause tinnitus
- [Menière's disease](#). This condition can cause tinnitus as well as dizziness and hearing loss.

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Loud machinery can cause tinnitus.

People who are depressed sometimes have tinnitus. But we don't know if the depression causes tinnitus or if tinnitus makes people depressed. ^[2]

It's possible for tinnitus to be caused by a growth (a tumour) near the nerve that runs from your ear to your brain. ^[1] This type of tumour is called an **acoustic neuroma**. It's very rare. An acoustic neuroma can be serious but it's a benign type of tumour. That means it isn't cancer and it can't spread to other parts of your body.

What are the symptoms of tinnitus?

People with tinnitus may hear constant: ^[1] ^[3]

- Ringing
- Roaring
- Clicking
- Hissing
- Buzzing
- Whistling
- Humming.

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The sounds happen most of the time but they can come and go.^[1] If the tinnitus is very bad it may be difficult to work or sleep.^[4]

If you have any of these symptoms you should see your doctor. He or she may refer you for a hearing test with a doctor who specialises in ear, nose, and throat problems (an ear, nose, and throat [ENT] specialist, also called an **otolaryngologist**) or someone who specialises in hearing disorders (an **audiologist**).^[1]

A hearing test can show whether your hearing is the same on the right and left sides. If you have hearing loss in just one ear your doctor may order another test called a **magnetic resonance imaging (MRI) scan**, to check for problems that might be causing the tinnitus. It's less likely that another health problem, such as a tumour or blood-vessel disease, is causing your tinnitus if your hearing is affected the same on both sides.

How common is tinnitus?

Tinnitus is very common. About 1 in 5 people in the UK and other developed countries have tinnitus. But only about 1 in 200 people have tinnitus that's bad enough to interfere with their lives.^[5]

What treatments work for tinnitus?

There are several treatments you can try to help you cope with tinnitus.

- You may find it helps just to learn from your doctor that there's nothing seriously wrong.
- If you're feeling depressed, some **antidepressants** can help, but they can have side effects.
- Sedatives may help you sleep, but they can make you tired, and you shouldn't take them for long.
- You can try to cover up the noise. This is done with machines called masking devices or as part of tinnitus retraining therapy. But there's not much research to say whether these things work.
- Some people feel better if they listen to music or other sounds they enjoy.^[1] This can be a distraction from the tinnitus.
- Hearing aids can make your hearing better, though they won't help your tinnitus. But, if you can hear better, tinnitus might annoy you less.^{[1] [6]}

We've looked at the best research and found that all the treatments fall under the category of needing further study to know whether they work.

Treatment Group 1

Treatments for tinnitus

Treatments that need further study

- [Antidepressants](#)
- [Sedatives](#)
- [Talking therapies, relaxation, and biofeedback](#)
- [Masking devices](#)
- [Tinnitus retraining therapy](#)
- [Other treatments](#)

What will happen to me?

There's usually no cure for tinnitus. But your doctor can make sure that there's no serious problem causing it. This may make you feel better about it. And there are several things you can try to help you cope.

Tinnitus can last for a long time. Many people get used to tinnitus and learn how to live with it.

If you are depressed because of tinnitus there are treatments that work to treat depression. To read more, see our information on [Depression in adults](#) .

Treatments:

Antidepressants

In this section

These medicines may help people with tinnitus feel better, especially if they are depressed. But they don't take away the tinnitus.

We found one summary of the research (called a [systematic review](#)) that looked at studies of tricyclic antidepressants (TCAs).^[7] The drugs used in studies were nortriptyline (Allegron), trimipramine (Surmontil), and amitriptyline (Elavil).

Results from the studies were mixed. Overall there seemed to be no clear benefit from taking these drugs for tinnitus.^[7]

The summary also looked at another drug used to treat depression, called paroxetine (Seroxat). Paroxetine is a type of antidepressant called a selective serotonin reuptake

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inhibitor (SSRI). The summary found that paroxetine didn't help with tinnitus symptoms.^[7]

Other studies have looked at an SSRI called sertraline (Lustral).^[8] ^[9] These studies found that sertraline might reduce the severity and loudness of tinnitus for some people, but that the improvement was not big enough to make much difference to people's lives.

Antidepressants can have side effects. These are more likely with tricyclic antidepressants, which can cause a dry mouth, blurred vision, and constipation. Dizziness can also be a problem, especially if you're older.^[10]

Research has found that taking antidepressants of all kinds can make some people more likely to think about suicide or try to harm themselves.^[11] People under 18 are especially at risk. You are more likely to think about self-harm in the early stages of your treatment, or if the dose of the antidepressant you're taking is changed.^[12] If you're taking an antidepressant and are worried about any thoughts or feelings you have, see your doctor or go to a hospital straight away.^[12]

Sedatives

In this section

Researchers have looked at a type of sedative called a benzodiazepine. There aren't many studies on using benzodiazepines for tinnitus, so it's hard to say for sure whether they work.

One small study (a randomised controlled trial) looked at people who took a benzodiazepine called alprazolam (Xanax) for three months. About 15 in 20 people who took alprazolam felt that their tinnitus got better. This compared with 1 in 20 people who took a dummy treatment (a placebo).^[13] Another study of alprazolam found similar results.^[14] But both these studies were small. We need bigger studies before we know whether these drugs can really help.

Although they might help, sedatives can have serious side effects. About 1 in 10 people who took alprazolam couldn't finish the study because the drug made them too tired.^[13]

As well as causing side effects benzodiazepines can be addictive. So they're not usually prescribed for more than a few weeks. This means they are not a realistic long-term treatment for tinnitus.

Talking therapies, relaxation, and biofeedback

In this section

Several studies have found that having a course of a talking treatment called cognitive behavioural therapy (CBT) might help people with tinnitus. Having CBT didn't cure tinnitus.

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But some people found that it reduced the severity of their symptoms, or that it helped them to cope with the symptoms and to feel happier and more able to enjoy life. ^[15] ^[16] ^[17]

We also found a study looking at 130 people who got either biofeedback or no treatment. ^[18] Biofeedback is a treatment used to help you relax by giving you more control over your body. People who had biofeedback were less annoyed by their tinnitus and felt they had more control over their condition.

We don't know if treatments like relaxation or education help. The studies into these treatments weren't done very well. ^[19]

If you are depressed, it may be helpful to see a [psychotherapist](#) . To read more, see our information on [Depression in adults](#) .

Masking devices

In this section

You can use a machine to try to block out the noise of tinnitus. The machine can be small and worn near the ear, like a hearing aid. Or the masking sound can be played through a speaker. Masking devices are sometimes called white-noise machines.

Some people distract themselves from their tinnitus by playing music or having the TV or radio on in the background.

There hasn't been much research about masking devices. ^[20] ^[21] ^[22] And some of the research that has been done isn't very good. ^[23] However, lots of people try masking devices, and doctors often recommend them alongside other treatments.

One small study found that 4 in 10 people improved while using a masking device, compared with 3 in 10 people getting a dummy (placebo) treatment. ^[21] However, 1 in 10 people got worse tinnitus while using a masking device. The study looked at just 17 people, so it may not be very reliable.

Tinnitus retraining therapy

In this section

Some health care practitioners have used masking devices along with talking treatments ([psychotherapy](#)) to treat tinnitus. The kind of psychotherapy used is called [cognitive behaviour therapy](#) . Together, this is called tinnitus retraining therapy. But we didn't find any good studies about it, so we don't know whether it can help.

Other treatments

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Many treatments have been tried for tinnitus. We've listed some of them here, but there's not enough research to say for certain whether they work or not.

- **Antihistamines.** Antihistamines are normally used to calm down allergic reactions . One antihistamine that has been studied as a treatment for tinnitus is called cinnarizine (Cinaziere, Stugeron, Stugeron Forte). Researchers found it didn't help. [\[24\]](#)
- **Acupuncture.** This involves having thin, sterile needles put in your skin. There have been lots of studies, but they are all quite small, and the results were mixed. We don't know whether acupuncture can help tinnitus. [\[24\]](#) [\[25\]](#) [\[26\]](#) [\[27\]](#) [\[28\]](#) [\[29\]](#) [\[30\]](#)
- **Magnets.** There's not much information about using electromagnetic stimulation or magnets for tinnitus. [\[31\]](#) [\[32\]](#) [\[33\]](#)
- **Hypnosis.** One small study found that trying to hypnotise people who had tinnitus didn't help any more than providing one session of counselling. [\[34\]](#)
- **Ginkgo biloba.** This is a herbal treatment. Several good-sized studies have looked at whether it can help people cope with tinnitus. The research suggests that it doesn't help. [\[35\]](#)

Further informations:

Glossary:

antibiotics

These medicines are used to help your immune system fight infection. There are a number of different types of antibiotics that work in different ways to get rid of bacteria, parasites, and other infectious agents. Antibiotics do not work against viruses.

diuretics

Diuretics are a type of medicine that reduce the amount of fluid in your body. The extra fluid is removed in your urine.

MRI scan

A magnetic resonance imaging (MRI) machine uses a magnetic field to create detailed pictures of the inside of your body.

antidepressant

Antidepressants are medicines used to treat depression and sometimes other conditions. They work by changing the levels of chemicals in your brain called neurotransmitters. There are three main types of antidepressants, which work in different ways: selective serotonin reuptake inhibitors (SSRIs), monoamine oxidase inhibitors (MAOIs) and tricyclic antidepressants (TCAs).

systematic reviews

A systematic review is a thorough look through published research on a particular topic. Only studies that have been carried out to a high standard are included. A systematic review may or may not include a meta-analysis, which is when the results from individual studies are put together.

randomised controlled trials

Randomised controlled trials are medical studies designed to test whether a treatment works. Patients are split into groups. One group is given the treatment being tested (for example, an antidepressant drug) while another group (called the comparison or control group) is given an alternative treatment. This could be a different type of drug or a dummy treatment (a placebo). Researchers then compare the effects of the different treatments.

placebo

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A placebo is a 'pretend' or dummy treatment that contains no active substances. A placebo is often given to half the people taking part in medical research trials, for comparison with the 'real' treatment. It is made to look and taste identical to the drug treatment being tested, so that people in the studies do not know if they are getting the placebo or the 'real' treatment. Researchers often talk about the 'placebo effect'. This is where patients feel better after having a placebo treatment because they expect to feel better. Tests may indicate that they actually are better. In the same way, people can also get side effects after having a placebo treatment. Drug treatments can also have a 'placebo effect'. This is why, to get a true picture of how well a drug works, it is important to compare it against a placebo treatment.

psychotherapist

A psychotherapist is a health professional who treats mental disorders by talking with their patients, rather than by prescribing medicines. There are many types of psychotherapy, including cognitive behavioural therapy and interpersonal therapy.

Psychotherapy

Different types of psychological treatment given individually, in groups, or within the family are included here. These use psychodynamic, cognitive behavioural, or supportive techniques, or combinations of these. Family therapy includes members of the family of origin or the constituted family, and addresses the eating disorder as a problem of family life. Non-Specific Supportive Clinical Management (NSSCM), currently known as Specialist Supportive Clinical Management (SSCM), is a form of supportive treatment that uses some motivational elements to increase engagement. The focus is to return to normal weight and eating in the usual environment. It consists of three phases: orientation, agree target symptoms and goals; monitoring and support to achieve goals; and work on ending therapy and relationship.

cognitive behaviour therapy

Cognitive behaviour therapy (CBT) is a type of talking treatment (psychotherapy). It is based on the idea that the negative thoughts and beliefs people have play an important role in how they feel and how they act. CBT helps people identify, look at and change unwanted thoughts, feelings and behaviours.

allergic reaction

You have an allergic reaction when your immune system overreacts to a substance that is normally harmless. You can be allergic to particles in the air you are breathing, like pollen (which causes hay fever) or to chemicals on your skin, like detergents (which can cause a rash). People can also have an allergic reaction to drugs, like penicillin.

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