

A close-up photograph of a man with brown hair and a light beard, wearing large, round, wooden headphones. He is looking off to the right with a neutral expression. The background is dark and out of focus. A blue vertical bar is on the left side of the image.

Understanding tinnitus

ACTION ON
HEARING
LOSS

You'll find this leaflet helpful if you want to know more about tinnitus (noise in the ear(s) or head) – whether you have the condition or know someone who does. We explain what tinnitus is, what causes it, and what therapies are available.

If you have any questions or would like more information, please contact our free Tinnitus Information Line:

Telephone	0808 808 6666
Textphone	0808 808 9000
SMS	0780 000 0360 (standard text message rates apply)
Email	tinnitushelpline@hearingloss.org.uk



When I was diagnosed with tinnitus, I was devastated. But with support from Action on Hearing Loss, I've been able to overcome this challenge. I manage my tinnitus best with rest and relaxation, along with a positive mindset. Now I barely even notice it.

Marc Nicholson, DJ (pictured on the cover)

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Medical disclaimer

The information given in this leaflet is not medical advice and, by providing it, neither Action on Hearing Loss nor our tinnitus and medical advisers undertake any responsibility for your medical care, nor accept you as a patient. Before acting on any of the information contained in this leaflet, or deciding on a course of treatment, you should discuss the matter with your GP (family doctor) or other medical professional who is treating you.

What is tinnitus?

Tinnitus is the name for sounds heard either in one ear, both ears or in the head, which don't have an external source. It's not a disease or an illness – in most cases, it's linked to a problem in the hearing system (see 'What causes tinnitus?', opposite).

Tinnitus is common, affecting one in 10 adults in the UK. People of all ages, including young children, experience tinnitus, but it's more common in those over the age of 60.

What does tinnitus sound like?

Tinnitus is usually described as a ringing, hissing, buzzing, roaring or humming sound. There may be a single sound or two or more, and the noise may be there all the time or come and go.

For a small number of people, tinnitus can sound like fragments of tunes or songs. This is known as 'musical hallucination'. In other rare cases, tinnitus is a rhythmical noise that may beat in time with the heart. This is called 'pulsatile tinnitus'.

 To find out more about these rare forms of tinnitus, see our factsheet *Musical hallucinations and pulsatile tinnitus*.

How does tinnitus affect people?

Tinnitus affects people in different ways. Most people who have the condition aren't troubled by it and may only find it mildly annoying. However, one in 10 adults with tinnitus find that it has a severe impact on their everyday life, causing sleep problems, depression, anxiety and stress.

Unfortunately, worrying about tinnitus, and thereby focusing attention on it, can make it worse. How loud tinnitus is, or what

it sounds like, doesn't seem to make a difference to whether it troubles people or not.

Stay positive

The good news is that most people find that their tinnitus slowly improves over time. This is because the brain gradually learns to 'filter out' tinnitus, so it becomes less intrusive. The process is called 'habituation' – it's the main goal of tinnitus therapies (see page 8).

What causes tinnitus?

The exact cause of tinnitus isn't fully understood and research is ongoing, but it's usually a symptom of a problem within the hearing system.

When we hear, sound waves enter the ear and are converted into electrical signals by tiny 'hair cells' in the inner ear. The hearing nerve then carries the electrical signals to the brain, where they are analysed and recognised, so we hear them as sound.

The brain has complex systems that filter out sounds that don't have meaning to us and control how we react to sound. This means that we might not notice the background sound of traffic or a clock ticking, but we would notice the sound of a baby crying or our name being spoken.

If there's a problem within your hearing system, such as damage to the hair cells or an ear infection, the brain doesn't receive as many electrical signals. Neurons (nerve cells in the brain) try to get more signals from the ear and become hyperactive. This activity creates 'noise' within the hearing system, and if the brain's filtering systems don't filter it out, you'll hear it as tinnitus.

What can tinnitus be linked to?

Tinnitus, like hearing loss, can be linked to many things that affect the hearing system, including:

- exposure to loud noise
- certain medications used to treat seriously ill people
- ear, head or neck injuries
- some ear conditions and diseases.

Tinnitus can sometimes be a symptom of hearing loss, but the association isn't straightforward. Two-thirds of people with tinnitus also have hearing loss, but many people with hearing loss don't have tinnitus.

Stress and tinnitus

It's also generally accepted that there's a strong link between stress and tinnitus. All sources of stress can be a trigger for tinnitus, or make it worse. And some people, though not all, find that tinnitus makes them feel stressed and anxious. These feelings aren't always caused by tinnitus, but they can be made worse by it.

So a vicious cycle develops: stress makes tinnitus worse, which leads to greater stress and anxiety. But there are lots of things to help break this cycle (see page 8).

For some people, tinnitus doesn't appear to be linked to any other ear problem. As there are so many factors that can lead to, or worsen, tinnitus, there's a lot of ongoing research into the exact cause(s) of the condition (see page 13 for details of our tinnitus research).

i For more on what tinnitus can be linked to, see our factsheets *Tinnitus - causes and therapies* and *Stress and tinnitus*.

Reduce your risk

If you've had a temporary ringing sound in your ears or head after you've been exposed to loud noise – for example, at a club or music concert – it's a sign that you've put your hearing system under stress. You're likely to have had dulled hearing as well, and it usually lasts about a day.

If you continue to expose your ears to such high noise levels, you risk permanent hearing loss and/or tinnitus. So protect your ears by wearing noise-reducing earplugs at a gig or in a club – and by limiting the volume on your MP3 player.

 Find out more: www.actiononhearingloss.org.uk/loudmusic

I think I have tinnitus – what should I do?

The first step is to see your GP. It might be that your tinnitus is caused by a temporary problem that your GP can treat, such as an ear infection or excess ear wax. If this isn't the case, your GP should refer you to the audiology or ear, nose and throat (ENT) department of your local hospital for further tests.

If you find it hard to get a referral to audiology or ENT, make sure you tell your GP how your tinnitus is affecting you: is it making you feel stressed or giving you sleep problems? Are you finding it difficult to cope? If you still can't get a referral, try seeing a different doctor. Remember, you have the right to a second opinion.

What will happen at the hospital?

You'll be seen by either an audiologist (a specialist who deals with balance and hearing problems) or a specialist in the ENT



department. They'll give you a thorough check-up to see if there's a temporary cause of your tinnitus. You'll also have a hearing assessment.

If there isn't an obvious cause of your tinnitus, you may then be referred to a tinnitus clinic, for information, advice and therapies to help you manage the condition. Some hospitals have specialist tinnitus centres or clinics, but not all – you may need to travel a bit further to attend one.

What can help me manage my tinnitus?

There's a lot of research being carried out to find a cure for tinnitus – until it's found, different self-management techniques, therapies and products can help to reduce the impact that tinnitus has on your life. You may be offered tinnitus retraining therapy, which involves counselling and sound therapy, or a combination of the following therapies. If you have anxiety, stress or depression as a result of your tinnitus, you may be referred to a psychologist for specialist support.

Counselling

Counselling is a very important part of tinnitus management. It can help you to understand the condition and how it can be managed. It can also help you deal with any stress you feel, and identify and deal with any false beliefs or fears you have about tinnitus.

Cognitive Behavioural Therapy (CBT)

CBT helps you to examine your thought patterns, beliefs and the way you do things, in order to understand why you react in certain ways. Research has shown that it can have a positive effect on tinnitus management.

A therapist will encourage and support you to challenge your ways of thinking about tinnitus, and find the best way for you to deal with the condition.

CBT isn't always available in tinnitus clinics, so your GP or tinnitus specialist might need to refer you to a trained CBT therapist.

Relaxation techniques

A regular relaxation routine can help you to manage the stress that is often associated with tinnitus (see page 6). You can learn to control your responses to stress by using relaxation techniques such as mindfulness. These are taught in many tinnitus clinics and audiology departments.

You can also try local adult education classes that specialise in relaxation techniques, and meditation and yoga classes.

 See our factsheet *Stress and tinnitus* to find out more.

Sound therapy

Many people find that they are more aware of their tinnitus in a quiet environment. Sound therapy (or 'sound enrichment'), works by filling the silence with sounds that distract you from listening to your tinnitus.

You can experiment with different sounds to find out what suits you best in different environments. For example, you might want to try:

- everyday sounds such as the TV, music or an electric fan
- static noise from a radio that is tuned between stations, sometimes called 'white noise'
- recorded natural sounds like the sea or birdsong.

Sound generators

Your tinnitus clinic might provide you with a sound generator (also known as a tinnitus relaxer), if available. These are about the same size as an alarm clock and produce a range of soothing sounds to create a peaceful atmosphere and distract you from your tinnitus.

There are a range of different types available – some are designed for use at night, and some come with a variety of extra features, such as aromatherapy fragrances and coloured lights.

Tinnitus apps

There are now many tinnitus apps (software applications) available for smartphones and tablet devices. They have a wide range of sounds to choose from, and some apps allow you to customise sounds for your needs. If you have a smartphone or tablet device, it's worth checking out what's available.

Wearable sound generators

You might find one or two wearable sound generators (sometimes called tinnitus maskers) helpful. You can get them from the NHS and you wear them in the ear like a hearing aid. They play soft 'rushing' sounds, similar to the sound of a TV or radio station that has no signal, or a rushing waterfall.

Some NHS services also offer a combination device that contains both a hearing aid and a sound generator.

The type of sound generator that you might be offered will depend on what's available from your NHS service, and what's most appropriate for your needs.

Don't completely mask your tinnitus

For sound therapy to be successful in the long term, set the volume of recorded sounds at just below the level of your tinnitus, so as not to completely mask it. It's thought that listening to sounds while still being able to hear your tinnitus at a very low level can help with the habituation process (so you 'train' your brain to 'filter out' the tinnitus).

How can hearing aids help?

If you have a hearing loss as well as tinnitus, hearing aids may help by:

- helping you to hear better
- making environmental sounds louder, which can mask, or distract you from, your tinnitus
- making listening easier, thereby reducing any stress and anxiety that may be associated with hearing loss.

Your audiologist will advise you whether hearing aids could help you, and which type would be best.

Why do I feel sensitive to sound?

Some people who are sensitive to sound also have tinnitus, but having one problem doesn't necessarily mean you will develop the other. The two can occur completely independently.

There are two main forms of sensitivity to sound:

- **Hyperacusis** – you find sound in general or certain sounds uncomfortable or painfully loud, even when they don't bother other people.
- **Misophonia or noise annoyance** – you find some sounds extremely irritating, even though you may not be particularly sensitive to sounds in general. If your dislike is strong enough, the term phonophobia is used.

 To find out more, see our factsheet *Hyperacusis*.

Looking for products to help with tinnitus?

We sell many products, and a range of CDs, that create soothing sounds to help you relax, sleep and manage your tinnitus. Call our Customer Services Team to find out more or to request our free *Product catalogue*. Alternatively, you can visit our online shop at www.actiononhearingloss.org.uk/shop

Telephone **01733 361 199**
Textphone **01733 238 020**
Email solutions@hearingloss.org.uk

Or shop online at
www.actiononhearingloss.org.uk/shop



What tinnitus research does Action on Hearing Loss fund?

There are currently no pharmaceutical drugs on the market specifically approved to treat tinnitus – we’re looking to change this.

We’re funding a range of projects that focus on improving our understanding of how tinnitus starts and progresses, so that this knowledge can be used to develop effective treatments.

We’ve also awarded a new grant to researchers at Newcastle University, who aim to develop a new technique to measure tinnitus by monitoring brainwave activity. This new technique will help tinnitus researchers progress potential new treatments from testing in the laboratory to testing in people – a critical step in developing new medicines. This research should make the future development of effective medicines to treat tinnitus easier and, hopefully, encourage more investment in this area.

 To find out more about the research we fund, visit www.actiononhearingloss.org.uk/biomedicalresearch

Where can I get further information?

We produce a wide range of free information covering hearing loss, deafness, tinnitus and related issues. Our leaflets cover the basics, while our factsheets go into more detail – you can find them on our website at www.actiononhearingloss.org.uk/factsheets or order free copies from our Tinnitus Information Line (see last page for details). Our friendly Tinnitus Information Line Officers will also answer any queries you have.

You can find lots of other useful information online at www.actiononhearingloss.org.uk

Other organisations

British Tinnitus Association (BTA)

The BTA campaigns for better services for people with tinnitus. It supports a network of tinnitus groups, has a range of publications and produces a quarterly magazine, *Quiet*.

Ground Floor, Unit 5, Acorn Business Park,
Woodseats Close, Sheffield S8 OTB

Telephone **0800 018 0527**

Textphone **0114 258 2279**

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info@tinnitus.org.uk

www.tinnitus.org.uk

NHS Choices

For information and tips on breathing exercises, mindfulness and relaxation, go to **www.nhs.uk/conditions/stress-anxiety-depression**

Alternative formats

If you'd like any of our leaflets or factsheets in Braille, large print or audio format, please contact our Tinnitus Information Line.

Information you can trust

We are certified by The Information Standard as producers of high-quality, evidence-based information. For a list of references for this leaflet, please email **references@hearingloss.org.uk**

Acknowledgement

Thanks to Dr Magdalena Sereda, Research Fellow in Tinnitus at the National Institute for Health Research Nottingham Hearing Biomedical Research Unit, for reviewing this leaflet and making sure that our information is accurate and based on the latest research and evidence.

Can you help us improve our information?

We'd love to hear what you think of this leaflet – please email reviewpanel@hearingloss.org.uk And do let us know if you'd like to join our Readers' Panel, to help us create new publications and improve existing ones.

Donate today and be part of the next life-changing breakthrough

Your support can help our research scientists develop new treatments and cures that will change the world for people living with hearing loss and tinnitus.

You'll not only help people coping with hearing loss today – millions of people in future generations will enjoy a better quality of life, thanks to your support.

Donate today

- Visit www.actiononhearingloss.org.uk/donate
- Telephone **020 7296 8264**
- Textphone **020 7296 8246**



We're Action on Hearing Loss, the charity working for a world where hearing loss doesn't limit or label people, where tinnitus is silenced – and where people value and look after their hearing. We can't do this without your help.

To find out more about what we do and how you can support us, go to www.actiononhearingloss.org.uk

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(standard text message rates apply)

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