



Information for  
patients and  
carers

## Tinnitus

This leaflet gives you information about tinnitus which you have been referred for by an ENT consultant or doctor

## What is tinnitus?

Tinnitus is the name given to the condition of noises in the ears and /or in the head with no external source. Tinnitus noises are described as various sounds, such as ringing, humming, whistling, hissing, and buzzing.

The word tinnitus is used when someone is describing the sensation of hearing a noise in the absence of any external sound.

The pitch, volume, pattern and frequency of tinnitus can vary from person to person, and where the sound is located is also somewhat variable. It can be heard in one ear, both ears, or in the middle of the head, or it may be difficult to pinpoint the location of the sound. The individual may experience a single noise or two or more components. The noise may be continuous or may come and go.

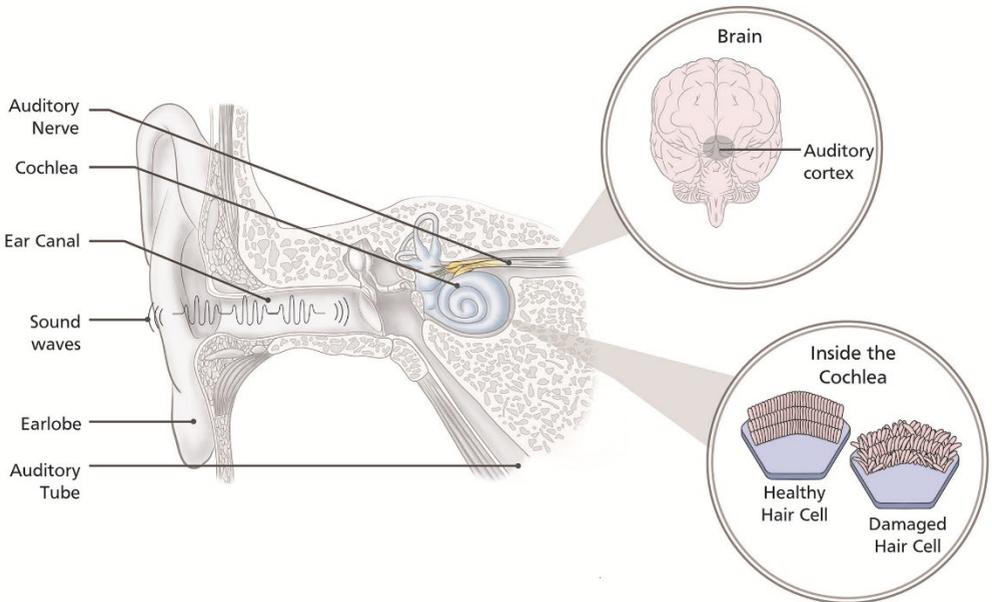


## What causes tinnitus?

It is important to remember that tinnitus is a symptom, which is generated in a person's auditory pathways. Tinnitus is therefore not an

illness or a disease.

There are many different causes of tinnitus, but we do know that it can be linked to hearing loss, injuries to the ear or head, exposure to loud noise, ear infections and/or emotional stress. It could be one or a combination.



## Who gets tinnitus?

Tinnitus may occur regardless of an individual's age, whether or not they have a hearing loss and/or have any history of ear problems.

Tinnitus is experienced by large numbers of people, from young children to the elderly. Mild tinnitus is common. Up to 10% of the population have it all the time and, in up to 1% of the adults, it may affect the quality of their life.

Most people who have tinnitus are not troubled by it.

How loud the tinnitus is, or what it sounds like, does not seem to make a difference to whether it troubles people. Even very quiet tinnitus can be problematic.

## Impact of tinnitus

For some people tinnitus can have an impact on their emotions, it can be a devastating and depressing experience.

When tinnitus starts, particularly if it is sudden, you may be understandably concerned, confused, angry, and your concentration or sleep may be disturbed.

When you are stressed or anxious the tinnitus may seem worse. Relaxation is extremely important here to help with tinnitus.

## Why do I feel the way I do when I have tinnitus?

We constantly listen to several sounds at once. They are all picked up and subconsciously recognised. Our brain decides what to listen to and what to ignore (priority).

For instance let us imagine this scenario:

1. You are sitting reading the newspaper and you hear the telephone ringing
2. The brain has heard the phone at a subconscious level and tries to identify what it is
3. You then become consciously aware and know instantly that someone is phoning you. You then react to this familiar sound in two ways, either by answering the phone or not

Usually when we do hear the familiar sound of the telephone ringing our response is to answer it because our brain has programmed this sound and knows that it means something. However, when we have our central heating on in the winter, we usually have it on a timer, but the noises that this constantly makes when it is coming on are usually ignored. It is perhaps only when it is first turned on for the winter that we notice the sound it makes, but then we soon forget about the noise and do not actually hear it. This is because we class this sound as not important. On the other hand the sound of the telephone ringing is important.

Importance and meaning of sound is centred in a subconscious area of the brain called the “**Limbic System**”. The limbic system is a major seat of emotion, and it attaches importance to certain sounds.

Now let us imagine this scenario:

You are lying in your bed at night trying to get to sleep and all of a sudden you hear a noise on the stairs. Once again the sound is detected subconsciously and the recognition/response process begins.

1. The brain recognises the sound, but cannot understand why it hears that sound because no one else is in the house. You have become consciously aware of it. The brain cannot ignore this sound, so you are intently listening to it
2. Because you are now so aware of it, you have an emotional response and begin to worry
3. This in turn causes a physical response, which can be increases in the rate of heart, beat, tensing up and sweating hands
4. These messages are sent all around the body, which encourages the emotional response, causing you to listen more acutely

This response/reaction carries on until you realise it is that pile of ironing you left stacked up on the stair, which has fallen over. It is only when your brain has thought logically enough to remember this, does it then recognise the sound, and you begin to calm down.

Now then let us look at a scenario in relation to your tinnitus. You may experience a similar response to that of the 'stair' incident.

1. You are lying in your bed at night trying to get to sleep and suddenly you hear your tinnitus
2. Your brain cannot recognise the sound of your tinnitus; therefore, you become conscious of the sound
3. Because you become conscious of the sound, you question it and begin the worry about it. This then makes you more aware of it and the thought process is dominated by this sound

You can then have a physical response to the sound, either by tensing up, increases in the rate of heartbeat or both. This then makes you more aware of it because you are listening to it.

## **Tinnitus 'subconsciously recognised' anxiety response**

From this scenario, it is common for you to develop feelings of anxiety and frustration in relation to your tinnitus. Because of this experience, when you are next lying in bed or sitting in a chair relaxing, and you hear your tinnitus, before you have become consciously aware of it, your brain responds to it in a negative way, making you become anxious.

Do not worry this association can be broken down, with help from your therapist.

## Coping strategies

The solution seems to be in part retraining the mind to accept the tinnitus and focus attention elsewhere.

Hence, many people say that they notice their tinnitus less when they are doing something. Keeping your mind active or occupied can help. It is however important not to overdo things (or concentrate intensely on something for a long period of time).

## Sound Enrichment

Using sounds to distract your brain away from tinnitus is called 'Sound Enrichment'. Such things as having a radio on when the room is quiet, for example at night time when you go to bed, this will give your auditory system something else to listen to. Just at a background volume level, not too loud.

There are other devices available to help enrich/distract. A 'White Noise Generator', which is the sound of white noise, worn at a low volume level, over a period of time helps an individual habituate to their tinnitus (these are available from your Hearing Therapist). Ask your Hearing Therapist about further ways of using sound enrichment during the day and at night time.

If you train yourself to become habituated (used to) to your tinnitus, so that you can place your attention on other things, you actually do not hear the tinnitus. This does take a lot of practice and patience, but once into the routine it is very effective. From here your annoyance levels of the tinnitus decrease.

Practising relaxation is an important aid to relieving tinnitus. Also giving time to yourself away from stresses and strains is equally necessary.

An action plan can be made with your Hearing Therapist to find out the best way to help you lessen your awareness of your tinnitus.

## Stress and tinnitus

Whatever the cause of the tinnitus, it is almost always made worse by stress, which can be physical, emotional or psychological.

Regular exercise or activities such as yoga can help. Starting a new hobby can be a great way to relax. Activities that help relax your muscles and mind are vital to helping you feel more relaxed and less anxious, hence reducing your anxieties about your tinnitus.

## Relaxation

### Breathing Exercises

A really easy way to relax is to find somewhere peaceful and just slow your breathing down (having background sound on can help this be even more effective). You can take a few slow deep breaths and pay full attention to the feeling of the breath entering your body, filling your lungs and leaving your body. When we use deep breathing to relax, we feel calmer and more able to manage the tinnitus, and often do not notice it as much.

### Mindfulness

This is a meditation technique that is used frequently for pain management, and more recently for tinnitus. Professor Mark Williams, former director of the Oxford Mindfulness Centre, says that mindfulness means knowing directly what is going on inside and outside ourselves, moment by moment.

"It's easy to stop noticing the world around us. It is also easy to lose

touch with the way our bodies are feeling and to end up living 'in our heads' caught up in our thoughts without stopping to notice how those thoughts are driving our emotions and behaviour," he says.

The idea is that we tend to resist unpleasant sensations (e.g. hearing tinnitus). If we stop resisting and allow the unpleasant sensation, this alters our awareness to include more sensations. We start to notice that sensations become less dominant once our attention moves away from them and focuses on a different part of the body. All of this can change in a moment, simply by changing our awareness. If we use mindfulness effectively, we can create some space from the tinnitus and in that space, we can decide how we are going to respond to it. It is a wonderful way of achieving 'peace and quiet'.

## Guided Imagery

Guided imagery is an effective stress management technique. It can quickly calm your body and simultaneously relax your mind. It is pleasant to practice, and not overly difficult or intimidating to learn. It can help you to de-stress in minutes and it can also be a useful strategy for maintaining resilience toward stress during difficult times. With the help of a guided imagery recording, a professional helper, or just your own imagination, those who practice guided imagery get into a deeply relaxed state and envision, with great detail relating to all of the senses, a relaxing scene, thus reducing your tinnitus awareness.

## Other techniques

Exercise (gentle walk), meeting friends, reading a book, starting a new hobby are all significantly effective in helping you distract away from your tinnitus, thus, reducing it long term.

## Sleep and tinnitus

About half of people who are troubled by their tinnitus have poor sleep. It is important to remember that the other half sleep very well. If you have tinnitus you are not bound to have poor sleep.

Sleep disturbance affects almost everyone at some stage of their lives. Mild sleep disturbances are very common. The problem can be 'difficult in falling asleep' and/or in 'staying asleep'. To be classified as 'insomnia' the delay in going to sleep or going back to sleep needs to be considerable and to occur several times a week and to have lasted for six months or more.

### Does tinnitus wake you up?

A normal night's sleep includes several stages from light to deep sleep. The normal pattern also includes several awakenings, the first after a few hours' sleep. Natural awakenings are usually forgotten by the morning, but if a person worries about his or her tinnitus they will last longer. It seems most likely that tinnitus does not actually wake people but, of course, it can be the first thing that a person is aware of when a natural awakening occurs.

### Pattern of sleep changes with age

As people grow older they experience less very deep sleep and more awakenings. Sleep becomes lighter and more fragmented and there is a tendency to nap during the day. Most people get about seven or eight hours sleep but there is an enormous range of sleep times.

Worrying about sleep is one of the things most likely to sustain tinnitus as a problem.

## Some things to avoid

- Avoid stimulants such as coffee, tea or nicotine within 6 hours of going to bed
- Avoid exciting television programmes within 3 hours of going to bed
- Avoid using alcohol to help you sleep. It may send you to sleep but apart from the problems associated with alcohol abuse, it will disrupt the normal pattern of sleep and it is likely that you will wake sooner and have more trouble going back to sleep
- Avoid exercise near bedtime, it may tire you out, but it disrupts the normal cycle of sleep. Fit people tend to sleep better, but getting fit should be done carefully
- Avoid using the bedroom as a place to do other things apart from sleep
- Do not sleep beyond a set point in the morning even if you have had only a small amount of sleep
- Avoid large meals immediately before retiring to bed and do not eat if you wake in the night. You may train your body to expect food at that time

## Some things to try

- Make sure you are warm and comfortable
- Relaxation can be very helpful in improving sleep. Classes and tapes are widely available
- Go to bed when you feel sleepy and not just because it is a certain time. Tell yourself that sleep will come when it is ready
- If you have worries spend a set amount of time (say half an hour) each evening considering how to resolve them. Actually

writing these worries down can help

- Avoid lying in bed getting irritated because sleep has not occurred. It is much better to get up and go to another room and do something quiet and relaxing such as reading
- Draw a curfew between daytime activities and night or bedtime activities. Try to wind down for at least an hour before going to bed
- Get up the same time each day, even at weekends. This improves sleep dramatically. Try not to sleep in the day or catch up on lost sleep. 'Cat' napping does not improve sleep patterns

## Mobile phone applications

Some useful apps to help with Tinnitus, sleep and/or relaxation:

- Resound Tinnitus Relief
- Widex Zen, Tinnitus Management
- Starkey Relax, Starkey Laboratories
- Tinnitus Balance Medical
- Oticon ON Medical
- Tinnitus Aid: Help Ear Ringing
- Mindfulness, Mental Health and Productivity
- Calm – Meditation and Sleep
- Headspace: Meditation and Sleep

## References

Beth-Anne Culhane, Advanced Audiologist, All About Tinnitus, 2019

[www.nhs.uk/conditions/stress-anxiety-depression/mindfulness](http://www.nhs.uk/conditions/stress-anxiety-depression/mindfulness)

[www.rnid.org.uk](http://www.rnid.org.uk)

[www.tinnitus.org.uk](http://www.tinnitus.org.uk)

[www.verywellmind.com/use-guided-imagery-for-relaxation-3144606](http://www.verywellmind.com/use-guided-imagery-for-relaxation-3144606)

Audiology Department (Hearing & Balance Service)

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## Sources of further information

[www.lancsteachinghospitals.nhs.uk](http://www.lancsteachinghospitals.nhs.uk)

[www.nhs.uk](http://www.nhs.uk)

[www.accessable.co.uk](http://www.accessable.co.uk)

All our patient information leaflets are available on our website for patients to access and download:

[www.lancsteachinghospitals.nhs.uk/patient-information-leaflets](http://www.lancsteachinghospitals.nhs.uk/patient-information-leaflets)

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Please ask if you would like help in understanding this information. This information can be made available in large print and in other languages.

### Gujarati:

આ માહિતીને સમજવામાં સહાયતા જોઈતી હોય તો કૃપા કરીને પૂછો. આ માહિતી મોટા છપાણામાં અને અન્ય ભાષામાં ઉપલબ્ધ કરી શકાય છે.

### Romanian:

Vă rugăm să întrebați dacă aveți nevoie de ajutor pentru înțelegerea acestor informații. Aceste informații pot fi puse la dispoziție în format mare și în alte limbi."

### Polish:

Poinformuj nas, jeśli potrzebna jest ci pomoc w zrozumieniu tych informacji. Informacje te można również udostępnić dużym drukiem oraz w innych językach

### Punjabi:

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਸਮਝਣ ਵੱਲੋਂ ਮਦਦ ਲੈਣੀ ਚਾਹੋਗੇ ਤਾਂ ਕਰਿਪਾ ਕਰਕੇ ਇਸ ਬਾਰੇ ਪੁੱਛੋ। ਇਹ ਜਾਣਕਾਰੀ ਵੱਡੇ ਪ੍ਰਿੰਟ ਅਤੇ ਹੋਰਨਾਂ ਭਾਸ਼ਾਵਾਂ ਵੱਲੋਂ ਮੁਹੱਈਆ ਕੀਤੀ ਜਾ ਸਕਦੀ ਹੈ।

### Urdu:

دوسری زبانوں اور ریڑی اگر آپ کو ہی معلومات سمجھنے کے لیے مدد کی ضرورت ہے تو  
یہی چھپا جس کی ابی دست ہو سکت ہے براے مہرے بان پوے چھہ۔ معلومات

### Arabic:

مطلبو عة بأحر ف كسيرة و بلغات إذا كنت تريد مساعدة في فهم هذه المعلومات يرجى أن  
أخري يمكنك تو فير هذه المعلومات

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