Suite 2101, 31a Lasso Road, Gregory Hills NSW 2557
Suite 102, 4 Hyde Parade, Campbelltown NSW 2560
P) 02 4625 1682 F) 02 4625 1032
www.macarthurent.com.au

MACARTHUR ENT

Sudden Sensorineural Hearing Loss

Sudden deafness is an ENT emergency

This sheet explains sudden sensorineural hearing loss (SSNHL), why assessment is urgent, the treatments that may be offered and what happens if hearing does not fully recover.

The most important message

- A sudden drop in hearing over hours or a few days should be assessed urgently - ideally the same day or within the next few days.
- Do not wait to see whether it settles. Treatment is most useful when started early.

What is sudden sensorineural hearing loss?

SSNHL is a rapid loss of hearing caused by a problem in the inner ear or hearing nerve, rather than wax or fluid blocking sound. It usually affects one ear. The classic research definition is a loss of at least 30 decibels across three neighbouring frequencies occurring within 72 hours, but clinically important sudden losses may not meet every part of this definition and still require urgent review.

Symptoms you may notice

- Sudden muffled or reduced hearing, often noticed on waking or when using the telephone
- A blocked or full feeling in the ear
- New ringing or noise in the ear (tinnitus)
- Dizziness, imbalance or spinning sensations

A blocked sensation does not prove that the problem is wax or congestion. A hearing test is needed to distinguish inner-ear hearing loss from a conductive problem.

What causes it?

In most people, no single cause is found. This is called idiopathic SSNHL. Possible mechanisms include viral inflammation, altered blood flow or an immune reaction affecting the inner ear. Less common causes include autoimmune inner-ear disease, a recognised infection, an inner-ear disorder, or a benign tumour of the hearing and balance nerve.

Assessment and tests

- Examination of the ear to exclude wax, infection, fluid or another conductive cause
- An urgent audiogram to confirm the type, pattern and severity of hearing loss
- An MRI of the internal auditory canals, usually as a high-resolution non-contrast scan, should be performed to check the hearing and balance nerves and exclude an uncommon problem behind the inner ear. Doctors sometimes call this retrocochlear pathology.
- Additional blood tests or other investigations only when the history suggests a specific cause

This MRI is a routine safety check. Most scans do not find a concerning cause, and being sent for an MRI does not mean that your doctor expects you to have a brain tumour.

Early treatment

Treatment is individualised according to the severity and pattern of hearing loss, the number of days since onset, other medical conditions and your preferences.

- **Within the first 2 weeks:** corticosteroids may be offered, usually as oral tablets, intratympanic injections through the eardrum, or a combination in selected cases.
- Steroids do not guarantee recovery and can have side effects. Your doctor will discuss issues such as diabetes, blood pressure, stomach problems, mood or sleep disturbance, glaucoma and other relevant health conditions.

Hyperbaric oxygen therapy

- Hyperbaric oxygen involves breathing oxygen in a pressurised chamber. It is not routinely offered to every patient with sudden hearing loss and is not an automatic treatment based on the hearing test or the number of days since symptoms began.
- Prince of Wales Hospital in Randwick has one of the limited number of hyperbaric medicine units in NSW. Whether hyperbaric oxygen is offered is decided case by case by your ENT surgeon together with the clinician on call for the Prince of Wales hyperbaric unit, taking account of our own treatment

results, current international guidelines, your clinical circumstances, medical fitness and service availability.

Treatment timeline

Time from onset	What may be considered
First 2 weeks	Initial treatment with oral and/or intratympanic steroids. Other additional treatment is considered only after individual specialist assessment.
2 to 6 weeks	If recovery is incomplete, intratympanic steroid injections should be offered or arranged as salvage treatment.
Further options	Any additional or salvage treatment is individualised. Hyperbaric oxygen requires agreement between your ENT surgeon and the on-call Prince of Wales hyperbaric clinician and is not routinely offered.
After treatment	Repeat audiogram, review of progress and discussion of hearing support if recovery is incomplete.

What recovery can I expect?

Some people recover some or all hearing spontaneously, while others have partial or little recovery despite treatment. It is not possible to predict the result with certainty. When improvement occurs, most is seen during the first month, although hearing can continue to change over several months.

Follow-up hearing tests

- Repeat the audiogram at the end of treatment, even if hearing feels normal.
- Repeat hearing testing within 6 months after treatment to confirm stability and identify any ongoing needs.
- Earlier or more frequent testing may be needed if hearing fluctuates, deteriorates again or symptoms change.
- Once a hearing device is fitted, hearing is generally checked at least yearly, or as advised by your audiologist.

If hearing does not fully recover

Early rehabilitation can reduce communication difficulty and uncertainty while recovery is being monitored. Options depend on the hearing in both ears and may include:

- A conventional hearing aid or temporary assistive listening device
- A CROS system, which sends sound from the poorer ear to the better-hearing ear
- Tinnitus support and communication strategies
- A cochlear implant for severe permanent hearing loss that receives limited benefit from hearing aids. For single-sided sudden hearing loss, implantation is usually not considered until about 3 to 6 months after onset, allowing time for recovery and treatment.

Seek urgent medical care now if

- Hearing has suddenly dropped in one or both ears
- You develop facial weakness, double vision, severe imbalance, new numbness, weakness, speech difficulty or another neurological symptom
- Hearing loss affects both ears, repeatedly returns or continues to worsen
- You have a severe headache, chest pain or other symptoms that may indicate a medical emergency

How to arrange review

Contact Macarthur ENT or seek urgent assessment through your GP, emergency department or another ENT service. If the hearing loss is recent, tell the person booking the appointment that it is sudden so the urgency is understood.

Evidence note: Based principally on the AAO-HNS Clinical Practice Guideline: Sudden Hearing Loss Update (2019), including treatment and follow-up timing. Individual recommendations may differ according to clinical circumstances.