SYMPTOM

Ear - blocked at high altitudes

A blocked ear at high altitude is a feeling of pressure or muffled hearing caused by changing air pressure.

WHAT IT FEELS LIKE
Pressure, fullness, muffled hearing, or needing the ear to pop

WHERE IT IS FELT
One or both ears, often deep inside

MOST COMMON CAUSES
Pressure change, nasal congestion, Eustachian tube blockage

WHEN IT IS URGENT
Sudden hearing loss, severe vertigo, or ear bleeding

USUALLY LASTS
Minutes to hours; longer when congestion prevents pressure equalising

SEE A DOCTOR IF
Symptoms last several days, recur often, or disrupt daily life

Overview

A blocked ear at high altitude usually happens when the air pressure outside your ear changes faster than the pressure in your middle ear. It can occur during a flight, mountain drive, cable-car journey, or other rapid change in height.

The middle ear is an air-filled space behind the eardrum. A narrow passage called the Eustachian tube connects it to the back of the nose and throat. This tube opens when you swallow or yawn, allowing pressure to equalise.

If the tube does not open easily, pressure pushes or pulls on the eardrum. This can create fullness, discomfort, popping, or temporary muffled hearing. The problem is often called ear barotrauma, meaning ear symptoms caused by a pressure difference.

Symptoms are often more noticeable during descent because the surrounding air pressure is increasing.

What it may feel or look like

You may notice:

Less often, you may have ringing in the ear, called tinnitus, or mild dizziness. Severe spinning dizziness, sudden major hearing loss, bleeding, or fluid coming from the ear is not typical of a simple blocked ear and needs medical attention.

Young children may cry, pull at an ear, or seem unsettled during descent because they cannot describe the pressure.

- Pressure or fullness in one or both ears
- Muffled or reduced hearing
- Popping, clicking, or crackling
- Mild to moderate ear pain
- A feeling that the ear needs to "pop"

Common causes

The most common cause is a rapid change in altitude. The Eustachian tube may not open quickly enough to keep the pressure equal on both sides of the eardrum.

A cold, sinus congestion, or nasal allergy can make this more likely. Swelling and mucus around the opening of the Eustachian tube may stop air moving freely.

Children are more prone to pressure problems because their Eustachian tubes are narrower and more level than those of adults. Sleeping through a descent can also contribute because swallowing happens less often.

Less common reasons for persistent blockage include fluid behind the eardrum, an ear infection, long-term Eustachian tube problems, or earwax that is separately reducing hearing.

A large pressure difference can occasionally injure the eardrum or structures of the inner ear. It is also possible for sudden hearing loss from another cause to begin around the time of a journey. These problems cannot be confirmed from the feeling of blockage alone.

When to seek medical care

Seek same-day medical advice if you have sudden hearing loss in one or both ears, particularly if it developed over hours or a few days. Sudden inner-ear hearing loss can feel like an ordinary blocked ear, but prompt assessment matters.

You should also seek urgent care for:

Call emergency services if hearing symptoms occur with facial drooping, arm or leg weakness, trouble speaking, confusion, or a sudden severe headache.

Book a routine appointment if the blockage lasts for several days after the altitude change, keeps returning, or does not improve as congestion clears. Arrange an assessment if pain, fever, discharge, or reduced hearing persists.

Babies and young children should be assessed if they remain very distressed, seem unwell, or are not responding normally to sounds.

- Severe or worsening ear pain
- Severe spinning dizziness or difficulty walking
- Blood or clear fluid coming from the ear
- Hearing that suddenly becomes much worse
- Ear symptoms after a head injury

How the cause is found

A healthcare professional will ask when the symptoms began, whether they changed during ascent or descent, and whether you have a cold, allergies, ear problems, or recent ear surgery.

They may look into the ear with a lighted instrument called an otoscope. This can show an eardrum that is pulled inward, bulging, bruised, or torn. It can also reveal fluid, infection, or earwax.

If hearing remains reduced, you may have a hearing test. Tympanometry, a test that measures how the eardrum moves, can help identify pressure or fluid behind it. Persistent or severe symptoms may require assessment by an ear, nose and throat specialist.

Treatment and self-care

Most mild pressure blockage improves once the Eustachian tube opens. While ascending or descending, try swallowing, yawning, sipping water, or chewing gum.

You can also try a gentle pressure-equalising manoeuvre. Close your mouth, pinch your nose, and blow very gently as though trying to breathe out through your nose. Stop if it causes pain or dizziness. Forceful blowing can make an ear injury worse.

For babies, feeding or offering a suitable pacifier during descent may encourage swallowing. Keep the child awake enough to swallow normally.

If you have pain, a non-prescription pain reliever may help if it is normally safe for you. Follow the package directions. Do not put cotton buds, fingers, ear candles, or other objects into the ear.

Saline nasal spray may help moisturise or clear a congested nose. Decongestant medicines are not suitable for everyone and may interact with other medicines. Ask a pharmacist or clinician before using one, especially for a child, during pregnancy, or if you have an ongoing medical condition. Use any nasal spray only as directed on its label.

If possible, delay another major altitude change until significant congestion or ear pain has improved. If you must travel, begin swallowing and equalising early rather than waiting for pain.

Treatment for a torn eardrum, persistent fluid, infection, or sudden inner-ear hearing loss is different and requires medical assessment.

What to expect

A mildly blocked ear often clears within minutes or hours after pressure equalises. Popping and crackling can continue for a while as air starts moving normally again.

Symptoms may last longer when a cold, allergy, or middle-ear fluid keeps the Eustachian tube blocked. Hearing should gradually return to your usual level. Ongoing hearing loss, repeated episodes, or worsening pain should be checked rather than repeatedly forced to "pop."

Most pressure-related ear symptoms settle without lasting damage. More significant eardrum or inner-ear injuries can take longer to recover and may need specialist follow-up.

Common questions

Why is it often worse when coming down?

During descent, the air pressure outside the ear rises. The Eustachian tube must open to let air into the middle ear. Swelling or congestion can make this difficult.

Can a blocked ear cause permanent hearing loss?

Mild pressure blockage usually causes temporary muffled hearing. Lasting damage is uncommon, but severe pressure injury or sudden inner-ear hearing loss needs prompt assessment.

Do pressure-regulating earplugs help?

They may slow the pressure change reaching the ear, but they do not replace swallowing, yawning, or gentle equalising.

Can I travel again while my ear is still blocked?

Another rapid altitude change may worsen pain if pressure has not equalised. Ask a healthcare professional before travelling if you have severe symptoms, a recent ear operation, a torn eardrum, or hearing that has not returned to normal.

Sources

- Centers for Disease Control and Prevention. Air Travel , CDC Yellow Book 2026
- American Academy of Otolaryngology-Head and Neck Surgery. Ears and Altitude (Barotrauma) , ENT Health
- Merck Manual Professional Edition. Otic Barotrauma
- National Institute on Deafness and Other Communication Disorders. Sudden Deafness
- Chandrasekhar SS, et al. Clinical Practice Guideline: Sudden Hearing Loss (Update). Otolaryngology-Head and Neck Surgery, 2019