CONDITION

# Enlarged adenoids

Enlarged adenoids are swollen immune tissue behind the nose that can affect breathing, sleep, and hearing.

**WHAT IT IS**
Enlarged immune tissue behind the nose

**BODY SYSTEM**
Ear, nose and throat

**MAIN SYMPTOMS**
Blocked nose, mouth breathing, snoring, disturbed sleep

**WHAT CAUSES IT**
Normal childhood growth, infections, or allergies

**HOW IT IS DIAGNOSED**
Nasal examination, often with flexible endoscopy

**MAIN TREATMENT**
Monitoring, nasal medicines, or adenoid removal

**CAN IT BE CURED?**
Sometimes - surgery removes obstructing tissue

**IS IT AN EMERGENCY?**
Sometimes - severe breathing difficulty

**LONG-TERM OUTLOOK**
Usually improves as adenoids shrink with age

## Overview

Adenoids are a patch of immune tissue high in the throat, behind the nose. Like tonsils, they help the body recognize germs, but they cannot usually be seen by looking into the mouth.

Adenoids are largest during childhood and normally shrink later in childhood. Enlarged adenoids are therefore most common in children, although adults can occasionally be affected.

Large adenoids may partly block airflow through the nose, causing mouth breathing, snoring, restless sleep, or a voice that sounds blocked. They also sit near the Eustachian tubes, which connect the middle ears to the back of the nose. Enlargement can interfere with these tubes and contribute to middle-ear fluid or hearing problems.

Some children have large adenoids without troublesome symptoms. Treatment depends more

on the effect on breathing, sleep, hearing, infections, and daily life than on size alone.

Adenoids are different from tonsils. Tonsils can be seen at the sides of the throat, while adenoids are hidden behind the nose. Both can be enlarged at the same time.

## Symptoms

Symptoms often develop gradually and may worsen during a cold or allergy flare.

Possible symptoms include:

Snoring does not always mean a child has obstructive sleep apnea. In sleep apnea, the airway repeatedly narrows or closes during sleep, causing breathing pauses, gasping, or frequent brief awakenings. Enlarged tonsils and adenoids are common contributors in children.

Young children may not be able to describe hearing loss from middle-ear fluid. Signs can include unclear speech, delayed language development, seeming not to listen, or difficulty following conversation in noisy places. These signs need assessment because they can have other causes.

- Ongoing nasal blockage
- Regular mouth breathing
- Snoring or noisy breathing during sleep
- Restless sleep, frequent waking, or unusual sleeping positions
- A blocked or "nasal" voice
- Persistent runny nose or mucus at the back of the throat
- Bad breath or a dry mouth
- Repeated ear infections or fluid behind the eardrum
- Reduced hearing or needing sounds turned up
- Daytime tiredness, irritability, or difficulty concentrating

## Causes and risk factors

Adenoids naturally grow during early childhood as the immune system develops. Some children simply have larger adenoids than others.

They may swell while responding to a viral or bacterial infection. Repeated infections can contribute to longer-lasting enlargement or inflammation. Nasal allergies may also worsen

swelling and blockage.

Factors associated with symptoms include:

Enlarged adenoids are not caused by poor hygiene or anything a child or parent has done wrong. They are not usually inherited as a single genetic condition, although allergy tendencies and facial structure can run in families.

Persistent or newly enlarged adenoid tissue is less common in adults. Adults with ongoing one-sided nasal blockage, bleeding, a neck lump, or persistent fluid in one ear should be assessed because other conditions can cause similar symptoms.

- Early childhood, when adenoids are naturally larger
- Frequent respiratory infections
- Nasal allergies
- Exposure to tobacco smoke or other airway irritants
- Enlarged tonsils or other features that narrow the airway

## Diagnosis

Diagnosis begins with questions about nasal breathing, sleep, ear problems, infections, and how long symptoms have lasted. Information from someone who observes a child sleeping can be helpful.

A healthcare professional may examine the nose, mouth, throat, ears, and neck. The tonsils can be seen through the mouth, but the adenoids usually cannot.

Flexible nasal endoscopy is often used to see the adenoids directly. A thin, flexible viewing tube is passed gently through a nostril to examine the area behind the nose. A local numbing spray may be used, and the test is usually brief.

A side-view neck X-ray is sometimes used when endoscopy is unsuitable, although it gives less direct information. Scans are not routinely needed for straightforward childhood adenoid enlargement.

If hearing is a concern, tests may include an age-appropriate hearing test and tympanometry, which checks eardrum movement and can identify middle-ear fluid or pressure problems.

A sleep study may be recommended if obstructive sleep apnea is suspected or its severity is uncertain. It records breathing, oxygen levels, heart rate, and sleep patterns overnight. Not every child who snores needs one.

## Treatment and management

Treatment is based on how symptoms affect the person, not only on adenoid size. Mild symptoms may be monitored because adenoids often shrink with age.

Saline nasal sprays or rinses can clear mucus and soothe an irritated nose. Treating diagnosed allergies may reduce swelling elsewhere in the nose.

A clinician may recommend a corticosteroid nasal spray for persistent blockage. These sprays reduce inflammation and may improve symptoms, but they need to be used correctly and regularly. Follow the product instructions and professional advice, especially for younger children.

Antibiotics like amoxicillin or doxycycline do not shrink uncomplicated enlarged adenoids. They may be prescribed for a diagnosed bacterial infection but do not treat viral infections or routine snoring.

Surgery to remove the adenoids is called an adenoidectomy. It may be considered for:

An adenoidectomy is performed under general anesthesia. It is commonly a day procedure, although some children need overnight observation. The tonsils may also be removed if they contribute to airway obstruction. Ear ventilation tubes may be inserted during the same anesthetic when middle-ear fluid is a significant problem.

Recovery can involve a sore throat, blocked nose, bad breath, and mild ear discomfort. Bleeding is uncommon but requires prompt medical advice. Other possible risks include anesthesia problems, infection, voice changes, and damage to nearby structures. The surgical team should explain the benefits, risks, recovery, and alternatives.

Removing the adenoids does not usually cause a noticeable loss of immune protection because other immune tissues perform similar functions.

- Nasal obstruction affecting breathing or sleep
- Obstructive sleep apnea
- Recurrent or ongoing adenoid infection
- Middle-ear fluid or ear problems in selected children
- Symptoms continuing despite appropriate non-surgical care

## Complications

Many people have no lasting complications. Problems are more likely when obstruction, poor

sleep, or middle-ear fluid continues.

Possible complications include obstructive sleep apnea, disturbed sleep, tiredness, irritability, and attention problems. Severe untreated sleep apnea can strain the body, although this is not the usual outcome of simple snoring.

Blocked Eustachian tubes can cause persistent middle-ear fluid, also called glue ear, and temporary hearing loss. Prolonged hearing difficulty in early childhood may affect speech, language, learning, or social interaction.

Long-term mouth breathing can cause dry mouth, sore lips, or dental problems. Persistent severe nasal obstruction during growth has also been associated with changes in dental and facial development, although many factors influence these features.

Symptoms may continue after adenoidectomy if allergies, enlarged tonsils, obesity, facial structure, or another airway condition also contributes.

## Prevention

There is no reliable way to prevent enlarged adenoids. They are normal immune tissue, and their childhood growth is part of normal development.

Reducing exposure to tobacco smoke and managing diagnosed nasal allergies may limit irritation but cannot guarantee prevention. Routine antibiotics do not prevent enlargement and should not be used for that purpose.

Handwashing and avoiding close contact with people who are unwell may reduce some respiratory infections, although common childhood infections cannot always be avoided.

## Living with it and what to expect

For many children, symptoms remain mild or improve as the adenoids gradually shrink with age. Nasal blockage may temporarily worsen during colds or allergy seasons.

Regular follow-up may be useful when symptoms affect sleep, hearing, or speech. Monitor changes in snoring, breathing pauses, daytime behaviour, school functioning, ear infections, and hearing. A short recording of unusual sleep breathing may help a healthcare professional understand what is happening, but it cannot diagnose sleep apnea.

After successful surgery, nasal breathing and sleep often improve. Snoring may take time to settle while postoperative swelling decreases. Ear or hearing symptoms may also improve, especially when middle-ear fluid is treated.

Adenoid tissue can sometimes grow back after surgery, particularly when removal occurs at a young age or some tissue remains. Returning symptoms should be reassessed rather than assumed to be regrowth.

Most children continue their usual activities, education, and social life. The outlook depends mainly on whether breathing, sleep, and hearing are affected and whether other conditions are present.

## When to get medical help

Arrange a routine appointment if nasal blockage, mouth breathing, or regular snoring lasts several weeks. Assessment is also appropriate for repeated ear infections, suspected hearing loss, unclear speech, persistent nasal discharge, or sleep symptoms affecting daytime life.

Seek prompt medical advice for repeated breathing pauses, choking or gasping during sleep, significant difficulty swallowing fluids, worsening ear pain with fever, or a marked change in alertness or behaviour.

Call emergency services if someone:

These signs are not typical of uncomplicated enlarged adenoids and may have another cause.

Adults should arrange an assessment for persistent nasal blockage or suspected adenoid enlargement, particularly if symptoms affect one side, include bleeding, or occur with a neck lump or ongoing fluid in one ear.

- Is struggling to breathe while awake
- Has blue, grey, or unusually pale lips or skin
- Cannot be woken normally
- Has a prolonged breathing pause or becomes limp

## Common questions

Do enlarged adenoids go away on their own?

They often become less troublesome as a child grows because adenoids usually shrink later in childhood. Symptoms disturbing sleep, breathing, or hearing should still be assessed.

Is snoring always caused by enlarged adenoids?

No. Snoring can also be related to enlarged tonsils, nasal allergies, a cold, body weight, or airway shape. Regular snoring with pauses, gasping, or daytime problems needs medical

assessment.

Does every child with enlarged adenoids need surgery?

No. Mild symptoms may only need monitoring or treatment of nasal inflammation. Surgery is considered when obstruction, sleep apnea, infections, or ear problems are persistent or significant.

Can enlarged adenoids affect hearing or speech?

Yes. They can block the tubes ventilating the middle ears, causing fluid and temporary hearing loss. Hearing difficulty may affect speech development, although speech changes can have other causes.

Can adenoids grow back after removal?

A small amount of tissue may remain and enlarge again. Noticeable regrowth is possible but does not happen to everyone. Returning symptoms need assessment because another cause may be responsible.

What is the difference between adenoids and tonsils?

Both are immune tissues. Tonsils sit at the sides of the throat and are usually visible through the mouth. Adenoids sit higher, behind the nose, and normally require a special examination to see.

## Sources

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