

# Mastoiditis

Mastoiditis is a rare bacterial infection. It affects the mastoid bone. This bone is the part of your skull that sits just behind your ear. Mastoiditis is more common in children.

If mastoiditis is diagnosed and treated quickly, most people will not have any complications.

## Symptoms of mastoiditis

Mastoiditis usually happens after you had an acute [middle ear infection](#).

Symptoms of mastoiditis include:

- redness, tenderness and pain behind the ear
- swelling behind the ear that can cause the ear to stick out
- fluid from the ear - this can persist even after antibiotic treatment
- a [high temperature](#), irritability and tiredness
- headache
- hearing loss in the affected ear

## When to get medical advice

Contact your GP as soon as possible if

you or your child have:

- symptoms of mastoiditis
- an ear infection that does not clear up with treatment or you get new symptoms
- been diagnosed with mastoiditis and treatment has not cleared it up

 [Find a GP](#)

## Causes of mastoiditis

The mastoid bone looks like honeycomb. It contains air spaces called mastoid cells.

You can get mastoiditis if the mastoid cells become infected or inflamed. This often happens if you have had a bad [middle ear infection](#).

A cholesteatoma can also cause mastoiditis. A cholesteatoma is an abnormal collection of skin cells inside the ear. It can stop the ear draining and can lead to infection.

## Diagnosing mastoiditis

Your GP will look into your ear using a device called an otoscope.

If your GP thinks you have mastoiditis, they'll refer you to an emergency department (ED) or an eye, nose and throat (ENT) specialist for more tests.

Tests usually include a blood test and an ear culture test. An ear culture test is where fluid from the ear is checked for a bacterial infection.

Some children may need to have a CT scan. A CT scan uses x-rays and a computer to create detailed images of the inside of the skull.

## Treating mastoiditis

Mastoiditis is a serious infection. It needs to be diagnosed early and treated with [antibiotics](#).

You may need to go to hospital so you can get antibiotics directly into a vein, through a drip.

In some cases, you may need surgery to either:

- drain the middle ear - this is called a myringotomy
- remove part of the mastoid bone - this is called a mastoidectomy

If you're admitted to hospital you'll need to stay in for a few days to get the infection under control.

### After surgery

If you've had surgery for mastoiditis, you may need to take 1 to 2 weeks off work or school to recover.

Take care not to get the affected ear wet. You should be able to wash your hair after about a week - do not get water in your ear.

You should be able to go swimming about 4 to 6 weeks after the operation. But this depends on how well your ear has healed.

Your doctor will give you advice after surgery. You will also have follow-up appointments with them.

## Complications of mastoiditis

Most people with mastoiditis do not get serious complications. But sometimes the infection will come

back.

Infection in the mastoid bone is serious. It can cause hearing loss.

It can also cause life-threatening health complications such as:

- a [blood clot](#)
- meningitis
- a brain abscess

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