

Microtia

What Is Microtia?

Children who have microtia have an ear (or ears) that are not fully formed or not normally formed at birth. The condition can be mild or severe.

In mild cases, the ear might be partly formed and the child might be able to hear. In severe cases, there might be very little ear tissue, and the child might have no hearing in the ear.

Due to the wide range in severity of the condition, the Centers for Disease Control and Prevention (CDC) estimates that less than 1 in 10,000 live births to 5 in 10,000 babies are born each year with microtia. It's more common for babies to have only one affected ear.

What Causes Microtia?

Experts don't know the exact cause of microtia. Some studies reported by the CDC indicate that women who have diabetes before they get pregnant, and pregnant women who eat a diet lower in carbohydrates and folic acid might be at a higher risk of giving birth to a baby who has microtia.

Types of Microtia

There are two forms of microtia:

- One ear affected (unilateral microtia).
- Both ears affected (bilateral microtia).

There are four grades of microtia:

- **Grade 1:** The child's ear could be small, but the ear canal is usually open. The outer ear has most of the features of a normally formed ear.
- **Grade 2:** The child's ear might be small, and might be missing some features. The child's ear canal could be open or closed.
- **Grade 3:** The child's ear canal is usually closed. A small bud of cartilage might be present in place of a normally formed ear. The child might have an ear lobe, but the lobe might not appear in a normal position or shape.
- **Grade 4:** Most of the child's ear is completely missing.

Microtia Symptoms and Effects

If your child has microtia, they might also experience:

- Reduced hearing (by roughly 40 percent) in the affected ear.
- Trouble figuring out which direction a sound is coming from.
- Frequent ear infections.
- External ear that is absent, or closed (also known as microtia atresia).

Microtia Diagnosis and Treatment

Because children are born already having the conditions (it's congenital), health care providers usually diagnose microtia immediately after birth, following a physical exam. At Gillette Children's Specialty Healthcare, we recommend a hearing test right after birth to determine if hearing loss affects one or both ears.

If your child has microtia, Gillette audiology experts might perform auditory brainstem response testing to see how sound travels from the ear to the brainstem. The test uses electrodes to measure the brain's reaction to sounds. It will show how well your child's auditory system works.

No Treatment

If your child has a mild case of microtia, you might decide not to have surgery, or to use a prosthetic ear instead.

Reconstructive Surgery

Most children who have microtia receive ear reconstruction surgery to rebuild the outer ear. The ear surgery is a three- to four-step process completed over a period of two or three months.

If your child has microtia surgery, it will usually begin around age 6, when their ear has grown to 90 percent of its adult size. Waiting until this age makes it easier to build the correct ear size.

Ear Implant

If reconstructive microtia ear surgery isn't possible for your child, we might recommend an ear implant instead. The implant procedure involves minor surgery and can offer realistic results.

Prosthetic Ear

A prosthetic ear is a nonsurgical treatment option. The prosthesis attaches to your child's skull, creating the appearance of a real ear.

Integrated Care

If your child has microtia, your family might have many other medical needs in addition to surgery services. Our [craniofacial and plastic surgeons](#)

understand how microtia affects your child's appearance and confidence. We'll work closely with you to create a treatment plan that fits your child's unique needs, so they can feel their best.

Your child might work with our internationally recognized specialists in:

- [Audiology.](#)
- [Ear, nose and throat \(ENT, or otolaryngology\).](#)
- [Psychology.](#)
- [Radiology and imaging.](#)
- [Child life.](#)
- [Social work.](#)
- [Speech and language therapy.](#)

Throughout your child's treatment, our multidisciplinary team of experts will offer support, answer your questions about microtia repair, and provide family-centered care.

[Make An Appointment](#) [651-290-8707](#)

This information is for educational purposes only. It is not intended to replace the advice of your health care providers. If you have any questions, talk with your doctor or others on your health care team.

If you are a Gillette patient with urgent questions or concerns, please contact Telehealth Nursing at [651-229-3890](#).