

# Hemifacial Microsomia

## What Is Hemifacial Microsomia?

Hemifacial microsomia (HFM) occurs when the lower half of one side of the face is underdeveloped and doesn't grow normally.

The condition is also called:

- First and second brachial arch syndrome.
- Oral-mandibular-auricular syndrome.
- Lateral facial dysplasia.
- Otomandibular dysostosis.

The condition can be mild to severe, but it always includes underdevelopment of the ear and lower jaw.

## What Causes Hemifacial Microsomia?

HFM is the second most common facial birth abnormality, after [cleft lip and palate](#). Researchers aren't sure what causes HFM. But most agree that something happens in the early stages of pregnancy, such as low blood supply to the fetus, that affects facial development. Studies don't link the condition to the mother's actions during pregnancy.

Parents of a child who has hemifacial microsomia have a less than 1 percent chance of having additional children with hemifacial microsomia. Adults who have the condition have a 3 percent chance of passing it to their children.

## Types of Hemifacial Microsomia

HFM ranges from mild to severe, and can involve different areas of the face. In more severe cases, the following areas of the face are underdeveloped:

- External and middle ear.
- Side of the skull.
- Thickness of the cheek tissue.
- Upper and lower jaws.
- Teeth.
- Some of the nerves that control facial movement.

In milder forms of HFM, only some of the structures of the face are affected, and less so than in severe cases.

## Hemifacial Microsomia Symptoms and Effects

## **Ears**

- Small ear (also known as **microtia**).
- No ear canal (also known as aural atresia).
- Skin tags in front of the ear.
- Other ear abnormalities.

## **Face**

- Trouble moving face muscles.
- Small cheekbone.
- Pinkish-white growth on the eye.
- Wide mouth (also known as macrostomia).
- **Cleft lip and palate.**

## **Jaw and Teeth**

- Limited opening of the mouth.
- Short lower jaw.
- Crooked lower jaw.
- Incorrect bite (also known as malocclusion).

## **Hemifacial Microsomia Diagnosis and Treatment**

If you think your child might have HFM, specialists start by reviewing medical history and performing a physical exam. Because the range of severity for HFM is so wide, a geneticist experienced in identifying such conditions usually makes the diagnosis.

Tests to confirm the diagnosis of HFM might include:

- **X-rays:** X-rays show internal tissues and bones of the head and face.
- **CT scan:** CT scans make diagnosing HFM easier, because they show more detailed images of the head and face than X-rays do.

If your child has HFM, they will likely need many surgeries. Hemifacial microsomia surgery can help to:

- Reconstruct bony and soft tissues.
- Create normal alignment of the upper and lower jaw.
- Create normal jaw function.

The timing of each surgery varies depending on the seriousness of the problems. Common surgeries include:

- Lowering the upper jaw to match the opposite side.
- Lengthening the lower jaw.
- Ear reconstruction at about age 5 to 6.
- Addition of bone to build up the cheekbone.
- Addition of soft tissue to further balance the face.

If your child has hemifacial microsomia, Gillette Children's Specialty Healthcare will work closely with you and your family to create a treatment plan that fits your child's unique needs.

Your child might benefit from our advanced techniques in [craniofacial and plastic surgery](#). They might also receive care from internationally recognized experts who specialize in the following hemifacial microsomia treatment areas:

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

Your child's well-being and self-esteem guide every decision we make at Gillette. Our team of multidisciplinary specialists will make sure you have the information and support you need, every step of the way.

[Make An Appointment](#) [651-290-8707](tel: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](tel:651-229-3890).