

Microphthalmia¹

What Is Microphthalmia? Microphthalmia is a condition in which one or both eyes are unusually small.

An individual with microphthalmia may have accompanying birth defects, as microphthalmia is a genetic mutation. <u>Genetics Home Reference</u> states that one-third to one-half of people with microphthalmia have it as a component of a syndrome (range of related birth defects).

How Is Microphthalmia Diagnosed? Microphthalmia is diagnosed soon after birth when parents and the pediatrician notice an abnormally small eye or eyes. Eye measurements can be taken to confirm the diagnosis.

Are There Treatments for Microphthalmia? There is no cure for microphthalmia. If your child has severe microphthalmia presenting with very minimal eye tissue and no vision in the affected eye(s), "conformers" (clear, plastic shapers) are recommended to be placed inside the eye socket(s) to promote proper growth and development of the eye socket and facial bones as well as to serve cosmetic purposes. The conformers are changed to a larger size every few weeks during the first two years of the child's life, encouraging growth of the eye socket alongside rapid facial growth. At approximately age two, prosthetic eyes (painted artificial eyes) can be inserted (and changed far less frequently).

If your child has some vision in the microphthalmic eye, eye patching may be utilized in order to strengthen that vision.

How Would You Describe the Eyesight of One with Microphthalmia and How Will My Child Function with It? If microphthalmia is present in one eye and your child has good vision in the other, he or she will not technically have "low vision." However, diminished or absent vision in one eye can affect how your child functions. Some children find it straining to read from a chalkboard or catch an oncoming ball, and many children struggle with depth perception.

If microphthalmia is present in both eyes, your child's vision can range from good to very poor. Your child's teacher of students with visual impairments should perform a <u>functional vision</u> <u>assessment</u> to determine how your child uses available vision and a <u>learning media assessment</u> to determine which senses your child primarily uses to get information from the environment. These assessments, along with an <u>orientation and mobility assessment</u> conducted by a mobility specialist, will give the team information needed to make specific recommendations for your child to best access learning material and his or her environment.

¹ https://www.familyconnect.org/info/after-the-diagnosis/browse-by-condition/microphthalmia/123



You may learn your child has difficulty recognizing faces and facial expressions, accessing information from a distance, identifying small images or letters on paper, or traveling safely. If this is the case, your child may benefit from travel training from the mobility specialist, increased contrast of the environment, increased contrast of print by using a CCTV or screen-magnification software, and increased room and task lighting. Your child may also benefit from assistive technology to more easily write, read, use the computer, and access information and from techniques and additional accommodations to perform activities with limited vision.

In severe cases, your child may also be taught to complete tasks without the use of vision. Your child's teacher of students with visual impairments may teach <u>braille</u>, use of <u>screen-reading</u> <u>software</u> to use the computer, and other techniques for performing life skills and academic tasks.

Resources for Families of Children with Microphthalmia

A Letter to New Parents Living with Microphthalmia by WonderBaby.org

Facts About Anophthalmia and Microphthalmia by the National Eye Institute

Facts About Anophthalmia and Microphthalmia by the CDC

Microphthalmia by Genetics Home Reference

