



Empowering Children. Supporting Families. Building Brighter Futures.

Resource 038 | Vision conditions

Refractive errors in children

What it means

Refractive errors are focusing problems that make vision blurred because light is not focused clearly on the retina. Childhood examples include myopia, hyperopia, and astigmatism. They are eye conditions, not cognitive disorders, but untreated visual blur can make play, movement, and learning harder. [1]

Causes and risk factors

Eye length and the shape or focusing power of the cornea and lens influence refraction. Genetic and developmental factors are relevant; some changes emerge as children grow. A focusing difference is not established by whether a child reads or sits close to a screen. [1,2]

General family education. A concern deserves assessment, but this guide does not diagnose a child or prescribe treatment.



Signs and everyday impact

Possible signs include squinting, sitting close to objects, eye strain, headaches, or difficulty seeing details. Young children may show no symptoms or may not be able to explain blur. Significant unequal errors between the eyes can contribute to amblyopia. [1,2]

Assessment and diagnosis

An eye examination measures age-appropriate vision and focusing. In young children, drops that temporarily relax focusing often help determine the true prescription. Eye health and alignment are assessed. An ordinary vision screen identifies concern but does not provide the full diagnosis or glasses prescription. [1,2]

Treatment and therapy

Glasses are the main treatment for many childhood refractive errors. Contact lenses or specialized approaches may be appropriate for selected children under eye care. Some children need treatment for associated amblyopia or alignment problems. Decisions about myopia control are individualized; adult refractive surgery should not be assumed to be routine treatment for preschool children. [1,2,3]

Support at home

Support prescribed glasses use, maintain safe frames, and attend review visits as the eyes grow. Provide comfortable lighting and accessible play materials. Ask the clinician about healthy visual habits and any specific activity or treatment advice, rather than following product claims.

When to seek help

Sudden visual loss, significant pain, a white pupil, or new neurological symptoms needs prompt medical assessment rather than a routine glasses check.

Questions for your care team

- What focusing error is present in each eye?
- Is amblyopia or strabismus also present?
- How often should the prescription and visual development be reviewed?



Podcast preparation

Use this outline to develop a later podcast script.

Suggested opening

Welcome to Mariel Early Intervention. Today we discuss refractive errors in children. Refractive errors are focusing problems that make vision blurred because light is not focused clearly on the retina. This is general education; each child needs individualized care.

Opening: Define the topic and its developmental context.

Understanding: Explain causes and signs without inviting self-diagnosis.

Assessment: Describe evaluation and distinguish screening from diagnosis.

Support: Discuss treatment, therapy, and practical family supports.

Closing: Explain urgent signs and one clear next step.

Misconception to address: A child can have a significant refractive error without complaining about blurred vision.

Before recording: update clinical references and local service details, arrange clinical review, and use fully consented or fictional examples.

Terms in plain language

- Myopia: difficulty focusing clearly at a distance.
- Hyperopia: a focusing error often called farsightedness.
- Retina: light-sensitive tissue at the back of the eye.

Sources and further reading

Sources accessed 3 October 2026. Numbered references support the clinical overview. Treatment availability and referral routes vary by country.

[1] Refractive Errors

<https://www.nei.nih.gov/eye-health-information/eye-conditions-and-diseases/refractive-errors>

[2] Astigmatism

<https://www.nei.nih.gov/eye-health-information/eye-conditions-and-diseases/astigmatism>

[3] Amblyopia (Lazy Eye)

<https://www.nei.nih.gov/eye-health-information/eye-conditions-and-diseases/amblyopia-lazy-eye>