



Empowering Children. Supporting Families. Building Brighter Futures.

Resource 041 | Vision conditions

Cerebral visual impairment

What it means

Cerebral visual impairment (CVI), also called cortical visual impairment in some contexts, involves difficulty using vision because the brain's visual pathways or processing areas are affected. The eyes may appear healthy. The child's usable vision can vary with visual complexity, fatigue, position, and environment. [1]

Causes and risk factors

CVI can be associated with early brain injury, prematurity-related complications, stroke, infection, and other neurological or developmental conditions. It can coexist with eye-based vision problems. The cause and visual profile differ between children; CVI should not be inferred solely from poor eye contact. [1,2]

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



Signs and everyday impact

A child may struggle to recognize faces or objects, locate items in clutter, look and reach together, or use vision consistently. Moving or visually simple objects may be easier for some children. Variability is meaningful information, not proof that the child is choosing not to look. [1,2]

Assessment and diagnosis

A pediatric eye clinician assesses the eyes and visual function, with neurological and developmental information as needed. A functional vision assessment examines how the child uses vision in real settings. Diagnosis may require several professionals and should consider coexisting ocular problems and other developmental needs. [1,2]

Treatment and therapy

There is no single treatment that applies to all CVI. Care addresses associated health conditions and provides individualized visual access, early intervention, educational support, and adaptations. Teachers of children with visual impairment, occupational therapists, and other specialists can coordinate strategies. Some children gain visual function, but improvement cannot be guaranteed. [1,2,3]

Support at home

Use the child's assessed visual strengths: reduce clutter, present manageable numbers of objects, allow response time, and choose position and contrast according to the plan. Add touch, sound, and communication supports rather than requiring vision for every task. Review adaptations as abilities change.

When to seek help

A sudden decline in vision or alertness, new seizures, or other neurological change needs medical assessment. An established CVI label should not explain away a new eye problem.

Questions for your care team

- What visual tasks and environments are easiest or hardest?
- Are eye-based conditions also present?
- Which adaptations should home and preschool use consistently?



Podcast preparation

Use this outline to develop a later podcast script.

Suggested opening

Welcome to Mariel Early Intervention. Today we discuss cerebral visual impairment. Cerebral visual impairment (CVI), also called cortical visual impairment in some contexts, involves difficulty using vision because the brain's visual pathways or processing areas are affected. 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: Healthy-looking eyes do not rule out a brain-based visual impairment.

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

Terms in plain language

- Functional vision: how vision is used in daily life.
- Visual complexity: the amount of visual information in a scene.
- Ocular: relating to the eyes themselves.

Sources and further reading

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

[1] Cerebral Visual Impairment (CVI)

<https://www.nei.nih.gov/eye-health-information/eye-conditions-and-diseases/cerebral-visual-impairment-cvi>

[2] Low Vision

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

[3] Vision Rehabilitation

<https://www.nei.nih.gov/learn-about-eye-health/vision-rehabilitation>