

## Interventions

It's been said, "if you meet one child with CVI, you've met one child with CVI." Each child is unique in what they need to support their visual learning. Strategies are based upon the child's range score and together with the child's IFSP/IEP team, a plan is developed to support their vision needs. What works for children with CVI, is a work in progress and everyone must learn how these children learn. (p.5 Sensory Balance: An Approach to Learning Media Planning for Students with CVI.)

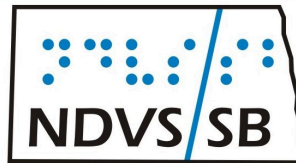


## Resources

- <https://www.perkins.org/cvi-now/>
- <https://pcvis.vision/>
- [strategytosee.com/](http://strategytosee.com/)
- [cvi.aphtech.org/](http://cvi.aphtech.org/)
- [cviresources.com/](http://cviresources.com/)
- [cvi.bridgeschool.org/](http://cvi.bridgeschool.org/)
- [cvijourney.com](http://cvijourney.com)
- [littlebearssees.org/](http://littlebearssees.org/)
- [cviscotland.org](http://cviscotland.org)
- [www.cviintervention.com/](http://www.cviintervention.com/)
- [www.facebook.com/StartSeeingCVI](https://www.facebook.com/StartSeeingCVI)

## How is it different from other visual impairments?

Individuals with CVI often have healthy eyes and obtain normal results on an eye exam, because it is the processing of vision in the brain that is atypical. CVI does not have an impact on visual acuity or many of the other symptoms of ocular visual impairments. However, some children can have both CVI and ocular visual impairment together. CVI cannot be corrected with glasses. Children and youth with CVI can be expected to make progress in their visual functioning over time if provided with appropriate assessment and intervention. CVI requires a very different approach to instructional supports and environmental /material adaptations as compared with ocular visual impairments.



**For further questions contact  
NDVS/SB:**

1-800-421-1181 or 701-795-2700

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# CVI

## Cortical Visual Impairment

Cortical Visual Impairment (CVI) is the leading cause of visual impairment in children in the United States, which naturally makes it a high priority for Teachers of the Visually Impaired at North Dakota Vision Services/School for the Blind. CVI is a brain-based visual impairment and is not caused by an ocular impairment. Instead, the brain is not interpreting what the eyes are seeing. TVI's at NDVS/SB are committed to staying current and knowledgeable about CVI. We participate in professional development opportunities to provide children, families, and educational staff relevant and up-to-date information to support the unique needs of CVI.

## How is CVI diagnosed?

- History of neurological impact.
- Abnormal visual behaviors that cannot be explained by the clinical eye exam.
- The presence of unique visual characteristics associated with CVI.

## Who can diagnose CVI?

An ophthalmologist, neurologist, neuro-ophthalmologist, optometrist, or other clinical specialist.

## Causes

Common causes of CVI are:

- Asphyxia
- Perinatal Hypoxia Ischemia
- Developmental brain defects
- Traumatic brain injury (shaken baby or accidental head injuries)
- Hydrocephalus
- Periventricular Leukomalacia (PVL)
- Intraventricular Hemorrhage (IVH) and infections of the central nervous system (Meningitis and Encephalitis)
- Seizure disorders

## 10 Characteristics associated with CVI

### Color:

Distinct color preferences. Commonly red or yellow, but could be any color.

### Need for Movement:

Need movement to activate visual system. Objects with movement properties like reflective mylar paper and moving an object help trigger the child to look.

### Visual Latency:

Visual responses to items presented are slow and frequently delayed.

### Visual Field Preferences:

Strong visual field preferences, generally peripheral fields; dysfunction of the lower field most common.

### Visual Complexity:

Difficulties exist in the complexity of the object, the visual array, the sensory environment, and looking at human faces.

### Need for Light:

Can have prolonged periods of light gazing due to a purposeful response to an overly complex environment/object display.

### Distance Viewing:

Difficulty with distance viewing.

### Visual Reflexive Responses:

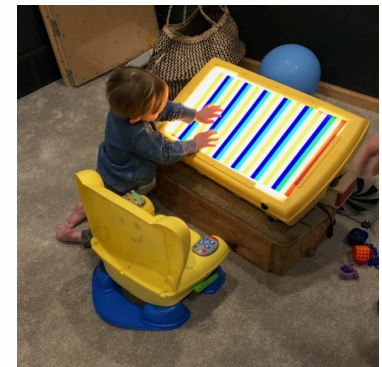
Absent or atypical visual reflexive responses. The child fails to blink at a visual threat and/or respond to a touch at the bridge of the nose.

### Visual Novelty:

Preference for familiar or favorite objects. The child does not respond to novel items unless they share features of familiar items, such as color.

### Absence of Visually Guided Reach:

The child does not look and reach at the same time. Looking and reaching occur as two separate events.



## Assessments

It's important to conduct a CVI assessment to measure the level of CVI experienced by the child. There are different assessment tools available for use by TVIs when conducting a CVI Assessment. CVI characteristics are identified and scored to determine the degree of impact on the child's learning. Dr. Christine Roman-Lantzy, Ph.D, breaks down the visual functioning into 3 phases. See insert for more information on the 3 phases.

