

Cerebral Vision Impairment (CVI)

What does this mean?

Cerebral Vision Impairment (CVI) is a condition where some of the special 'vision' parts of the brain and its connections are damaged. This causes visual impairment even though the eyes are normal. Often children with CVI actually have good visual acuity but cannot 'make sense' of what they see. In most cases, once the damage has happened it does not get worse. As the child grows older the visual difficulties may slowly improve.

The many different 'vision' parts of the brain combine together to make two visual 'systems':

- Dorsal Stream – flow of information about the visual world from one place to another.
- Ventral Stream - helps us to recognise faces, objects and places.

Implications for learning

- Vision seems variable; the child appears see less well when tired or ill.
- Difficulty finding the beginning of a line or the next word when reading, or misses pictures or words on one side of a page.
- Reaching beyond or around the object when picking it up, perhaps grasping it incorrectly, missing or knocking it over.
- Uncoordinated movement.
- Gets lost, anxious or distressed in visually complex places such as crowded places, supermarket, or busy swimming pool, or cinema.
- Regularly bumps into things when walking while talking.
- Sits closer than 30 cm to the television.
- Difficulty concentrating in visually busy environments, especially if noisy too.
- Inability to fix on objects for any length of time.
- Difficulty selecting a toy from a full box or clothing from a pile or full drawer.
- Lack of, or slow response to objects on a "busy" background which the child may respond to against a plain, contrasting surface.
- Eye movements not made independently of head movements, or not very regular and "smooth".
- Difficulty recognising familiar people or objects such as the family car or classroom door.
- Reacts angrily when distracted from a task.
- Lack of response to faces or facial expressions.
- Profound difficulty copying down information.

Ways to help

- Use of good colour contrast.
- Use of optimal lighting, reducing glare with blinds where necessary.
- All background clutter and decoration needs to be kept to an absolute minimum.
- Environments to be kept crowd free, with noise levels kept to a minimum

Other resources:

<https://cvisociety.org.uk/>

<http://www.ssc.education.ed.ac.uk/resources/vi&multi/eyeconds/CereVI.html>

<https://www.rnib.org.uk/insight-online/cerebral-visual-impairment>

<http://berkshiresensoryconsortium.co.uk>