# Assignment Related to Deaf-Blindness: CVI

***This assignment was developed by Megan Cote and Mark Schalock (National Center on Deaf-Blindness) and Lyn Ayer (Oregon Deafblind Project) for the Family Nurse Practitioner master’s program at Oregon Health & Science University. It may also be useful for programs that train other types of service providers.***

**VIDEO:** [**Cerebral Visual Impairment: A Brain-Based Visual Condition**](http://www.perkinselearning.org/videos/webcast/cerebral-visual-impairment-brain-based-visual-condition)

Presented by Amanda Lueck

In this 20-minute webcast, Dr. Lueck provides an overview of cerebral visual impairment (also known as cortical visual impairment or CVI) and the challenges that parents and professionals face in understanding how children with this condition use their vision. She emphasizes the importance of assessing the child to understand what and how they see.

Students will:

* Watch the webcast
* Read the definitions on page 3, the chart on page 5, and “Cortical Visual Impairment: Some Words of Caution” on pages 6-9 of [this article on CVI](http://sesa.org/pub/Vision/SESASpring07CVI.pdf)
* Look at the [symptoms and causes of CVI](http://www.childrenshospital.org/conditions-and-treatments/conditions/c/cortical-visual-impairment/symptoms-and-causes) on the Boston Children’s Hospital website
* Review the document [Risk List for Combined Vision and Hearing Loss in Infants and Toddlers: Associated Etiologies with Corresponding ICD-10 Codes](https://nationaldb.org/materials/page/1967/8) to see what diagnoses are associated with CVI

After looking at the items above, students will prepare a one-page checklist they can use to flag children they suspect might have undiagnosed cerebral visual impairment, in order to refer the family to the child’s doctor or a pediatric ophthalmologist for further evaluation and/or diagnosis.

**Additional Resources:**

* Lueck, A. H., & Dutton, G. N. (2015). [***Vision and the brain: Understanding cerebral visual impairment in children***](http://www.afb.org/store/Pages/ShoppingCart/ProductDetails.aspx?ProductId=978-0-89128-639-4&ruling=Yes). New York, NY: AFB Press. **List price: $79.95 (print), $55.95 (e-book), $47.95 (online). Available from the** [AFB Store](http://www.afb.org/store/Pages/ShoppingCart/ProductDetails.aspx?ProductId=978-0-89128-639-4)**.**
* [An Update on Progress and the Changing Epidemiology of Causes of Childhood Blindness Worldwide](https://www.ncbi.nlm.nih.gov/pubmed/23237744) (Kong et al.) (Shows CVI as leading cause in the U.S.)
* PowerPoint presentation: [Visual Processing Disability: Cerebral Visual Impairment](http://www.lea-test.fi/files/3_Processing_disability_HK.pdf) (Lea Hyvärinen, MD) (Information on how to diagnose)
* PowerPoint presentation: [Cortical Visual Impairment: Diagnostic and Therapeutic Considerations](http://www.powershow.com/view1/191aa3-ZDc1Z/Cortical_Visual_Impairment_Diagnostic_and_Therapeutic_Considerations_powerpoint_ppt_presentation) (Linda Lawrence, MD)
* Tools from Dr. Lea Hyvärinen:
  + [YouTube videos](https://www.youtube.com/user/DrLeaHyvarinen)
  + [Lea-Test Ltd website](http://www.lea-test.fi/)
  + [Facebook page](https://www.facebook.com/Dr-Lea-Hyvarinen-Lea-Test-Ltd-179523495403633/)
* Online course: [Introduction to Cerebral Visual Impairment in Children: Visual Impairment Due to Damage to the Brain](http://www.perkinselearning.org/earn-credits/online-class/introduction-cerebral-visual-impairment-children-visual-impairment-due)

In this comprehensive course Dr. Amanda Lueck describes the differences between ocular and cerebral visual impairment, describes the brain’s role in the visual system, and identifies terms related to disorders of the visual brain. She also discusses functional consequences of CVI, social implications, and assessment and teaching methods and tools.

* [Cortical Visual Impairment Pediatric Visual Diagnosis Fact Sheet](http://www.tsbvi.edu/seehear/fall98/cortical.htm)
* [A Primer on Cortical Visual Impairment](http://www.reviewofophthalmology.com/article/a-primer-on-cortical-visual-impairment-42791) (Sharon S. Lehman, MD)
* Webinar: [Ophthalmologic Examination Integrated With Functional Aspects of Cortical Visual Impairment](http://www.perkinselearning.org/videos/webinar/ophthalmologic-examination-integrated-functional-aspects-cortical-visual-impairment) (Sharon S. Lehman, MD)
* [A Team Approach to Cortical Visual Impairment in Schools](http://lbs.littlebearsees.netdna-cdn.com/wp-content/uploads/2012/01/A-Team-Approach-to-CVI-in-Schools-June-2009.pdf) (Donna Shaman, MOT)
* Websites and social media pages:
  + [Little Bear Sees](http://littlebearsees.org/) (website by and for parents) and its [Facebook page](https://www.facebook.com/littlebearsees)
  + [CVI at the American Printing House for the Blind](http://tech.aph.org/cvi/)
  + [The Cerebral Visual Impairment Society](http://www.cvisociety.org.uk/)
  + [CVI, TBI, and Neurological Vision Loss on the American Foundation for the Blind website](http://www.afb.org/info/living-with-vision-loss/eye-conditions/cortical-visual-impairment-traumatic-brain-injury-and-neurological-vision-loss/123)
  + Facebook page: [Thinking Outside the Light-Box](https://www.facebook.com/Thinkingoutsidethelightbox)
  + Facebook page: [Start Seeing CVI](https://www.facebook.com/StartSeeingCVI/)

The contents of this document were developed under a grant from the U.S. Department of Education #H326T130013. However, those contents do not necessarily represent the policy of The Research Institute, nor the U.S. Department of Education, and you should not assume endorsement by the Federal Government. Project Officer, Jo Ann McCann.