Recommended Practices for
Vision Screening of Children Ages Birth to Five Years

ALL Children are Testable
This document was written to provide guidelines for the development and refinement of vision screening practices of young Children, including those who are preverbal and nonverbal.

Who should be screened and When?

All children should be screened for possible vision and/or eye problems, especially those under the age of three with a suspected or identified risk factor, regardless of severity.

The American Academy of Ophthalmology and the Canadian Ophthalmological Society recommend that a newborn's eyes be examined for general eye health and major anomalies by a pediatrician or family physician in the nursery. A family physician, pediatrician , or ophthalmologist should screen all infants by six months of age for eye health and all preschoolers (three to four years of age) for visual acuity. Screening by the professional should occur earlier whenever parents/caregivers/teachers suspect an eye or vision problem or if the child is at high risk for such problems.

What are Risk Factors for Visual Impairment?

Any childe whose parent/caregiver/teacher has concerns regarding visual development.

Any child who has the following medical conditions and or diagnoses:

- Family history of amblyopia, strabismus, and any congenital ocular abnormality
- Prenatal virus
- Prenatal exposure to drugs, alcohol, and /or environmental hazards
- Prematurity and/or low birth weight
- Cerebral palsy
- Hearing loss
- Syndrome
- Traumatic brain injury
- Postnatal infection
- Receives an ongoing medication such as an anticonvulsant.

Who Should Conduct the Screening?

The initial screening should be conducted by a physician whenever possible. When this is not initially feasible, screening should be carried out by a trained personnel, as determined at the local level, working with a parent/caregiver/teacher who is familiar with the child. When questions arise, the screener should then request assistance from a recognized (state or provincial) team of qualifies individuals, which includes educational and medical personnel.

What is the Role of the Vision Screener?

To Document visual performance during the screening.

To identify potential problems in visual development.

To communicate the results of the screening to the family and appropriate professionals.

To ensure the continuation of the screening process, if needed, and make referrals.

To follow up on all referrals.

How Should The Screening Be Conducted?

To begin:

Establish a rapport with the child.

Position the child appropriately

Allow for a variety of communication methods

Provide extra response time for the child.

Use methods of observation that follow the child's lead and, if necessary; observe within the child's home or school environment.

Include test items that are familiar and/or interesting to the child.

Screen with a team approach (e.g. parent/caregivers/teachers).

Provide opportunity for rescreening whenever the results are inconclusive due to illness, fatigue, or other confounding factors.

To test:

Review the medical history of the child and his/her family noting high risk populations, current use of medications and significant medical findings.

Elicit parent/caregiver observations of child in different natural environments. Encourage the parent/caregiver/teacher or some one who knows the child to note any concerns about the child's vision.

Use screening tools that address:

- appearance of the child's eyes
- pupillary response to a light source
- ocular muscle balance
- oculomotor skills such as fixation, visual pursuit and convergence
- visual field
- functional/clinical visual acuity (near and distance); also noting any significant difference between the acuity of each of the eyes.

Possible Outcomes of the Screening Process:

Outcome One: No problems are observed and there are no concerns of the parent/caregiver or screener. The child passes the screening and is screened again at the next recommended age.

Outcome Two: One or more of the high risk conditions have been identified, but there are no observable problems with visual performance. On the day of the screening, information should be given to the family and the local service provider about (a) high risk indicators of visual problems; (b) how to observe visual performance; and (c) resources to contact, if vision problems are observed at a later date.

Outcome Three: A prompt referral to an eye care specialist should be made if:
(a) The child has an observable eye condition such as excessive tearing, redness, eye deviation or misalignment, nystagmus (jerky repetitive eye movements), drooping eye lid, cloudiness of the pupil or cornea, etc.
(b) The child has observable difficulty with one or more behavioral items (e.g. visual behavior and acuity) on the screening tool.
(c) The parent/caregiver/teacher or screener still has questions and the team is unable to make a determination of whether the child is having visual difficulty. This includes any evidence of a significant difference in acuity of the two eyes (risk of amblyopia), abnormal head tilt, squinting of eyes, closing or covering of one eye, and not wanting to wear prescribed glasses.

Remember: this does not mean that the child is untestable. It does mean the screener is responsible for referring the child on to someone else for more in-depth evaluation.

Special Note

Screening procedures for young children should use family-centered practices, i.e. communicating in a language that the family understands; informing families about the

purpose, procedures, and results of the screening process; and gathering information from families in a simple and respectful way.

Young children can be difficult to test. Local teams are knowledgeable about the available resources in their area and should send families to the local professionals who are best qualified to handle referrals from the screening.

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