
**SERVICE GUIDELINES:
FOR YOUNG CHILDREN WHO ARE
BLIND AND VISUALLY IMPAIRED**
(Includes Deaf-Blind Guidelines)

Guidelines for Child and Family Connection Staff

Illinois Early Intervention

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PREFACE

Children who are visually impaired or blind and their parents should have Early Intervention services available to them from the earliest age possible. These children and their families would benefit from an understanding of visual impairment and the uniqueness associated with visual impairments.

The purpose of this document is to increase understanding related to what constitutes appropriate early identification and intervention for children who are blind and visually impaired. It is intended for use by Child and Family Connections (CFC) staff as they find children in need of Early Intervention services and develop, with the Individualized Family Services Plan (IFSP) team, including the family, an IFSP appropriate for the child. It is intended to provide information about very young children who have vision problems in isolation or in conjunction with other disabling conditions.

One infant in three thousand is diagnosed with a visual impairment. In addition, 40-66% of children diagnosed with visual impairments have additional disabilities which may include motor, cognitive, language, and other sensory impairments. Visual impairment may directly effect a child's motor, language, cognitive, social, and adaptive development. Special attention should be provided to such developmental needs to ensure that these children will reach their full potential. Vision is central to the learning process. The age of birth to three is when children typically move around, visually explore their environment and build concepts of their world. In the presence of a visual impairment, early intervention can help encourage the overall development of the child.

IDENTIFICATION

Very young children can not tell us how or what they see. In addition, they don't know what they should see and, therefore, don't typically complain when they are having problems. Vision problems are not always obvious.

Infants and toddlers who have vision problems may learn to see in ways that are different than a child with normal vision. These children may need help learning simple skills such as eating, playing, or naming common objects. Without help, they may not be able to "catch up" later.

It is critical that young children with vision problems be identified early in their development so that appropriate support, including Early Intervention, services can begin. It is recommended that all children referred to CFC for evaluation to determine eligibility for Early Intervention services be screened for evidence of a possible vision problem. Children with possible vision problems should be referred to an optometrist or ophthalmologist for a complete diagnostic vision examination.

Screening Process

Refer to Appendix A for the ***Illinois Functional Vision Screening Tool***. This screening tool should be used by a parent, a service coordinator or a developmental therapist at intake and again on an annual basis to identify possible visual concerns. Any child found to have a vision concern should be referred to an eye care specialist. When possible, children with confirmed visual problems should then be referred to a Developmental Therapist Vision (DTV) for a functional Vision Evaluation to determine visual effects on development.

Vision screenings only give an indication of the child's visual acuity at the time of the screening. A normal vision screening at one point in a child's life does not mean that the child's vision will always be normal. It is important, therefore, to complete a vision screening each year and to become familiar with the developmental milestones related to vision.

EVALUATION AND ELIGIBILITY

If there is a concern about vision, a child should be referred for further vision evaluation. First, the child should be referred for a diagnostic vision examination with an optometrist or an ophthalmologist. If a child is diagnosed with a qualifying visual impairment, Developmental Therapy Vision (DTV) services should be pursued. An evaluation by a DTV should be sought if a vision diagnosis is not given but vision continues to be considered as a hindrance to the child's development.

DIAGNOSTIC VISUAL EXAMINATION

A child should be referred to an Ophthalmologist or Optometrist if any of the following are present. (Note: A Pediatric Ophthalmologist or Pediatric Optometrist is preferable.)

- The child shows a problem in the functional vision screening or vision evaluation
- The child cannot be appropriately screened,
- The family has a history of genetic eye diseases.

An example of what should be included in a Diagnostic Vision Examination can be found in Appendix B.

FUNCTIONAL VISUAL EVALUATION

Vision loss is considered to be a "low incidence" disability. Accordingly, the numbers of appropriately trained and experienced professionals are small. Children who are blind or visually impaired have unique developmental characteristics. Only professionals trained and experienced in evaluating and assessing this population should perform assessment and evaluation of their functional vision. ***A Development Therapist Vision will conduct a Functional Vision Evaluation to determine the effect a child's vision loss is having, or could have, on development.*** To help in the location of such individuals, Hearing and Vision Connections may be contacted at (217) 479-4318.

An example of what should be included in a Functional Vision Evaluation can be found in Appendix C.

ORIENTATION AND MOBILITY EVALUATION

An Orientation & Mobility Evaluation is conducted to assess one's ability to use remaining senses in establishing position and relationship to all other significant objects in the environment and to navigate from a present fixed position to a desired position in another part of the environment. In Early Intervention, only those credentialed as Developmental Therapist Orientation and Mobility have this specialized training and should conduct this type of evaluation. To help in the location of such individuals, Hearing and Vision Connections may be contacted at (217) 479-4324.

An example of what should be included in an Orientation and Mobility Evaluation can be found in Appendix D.

DETERMINATION OF ELIGIBILITY FOR EARLY INTERVENTION

It is recognized that a vision loss is a condition that has a high probability of developmental delay without early intervention services.

Once the vision screening, examination and evaluation have been completed and appropriate summary reports have been received, eligibility can be determined for appropriate Early Intervention services.

Children are eligible for Early Intervention services if they are experiencing a developmental delay (30% or greater) in one of more of the following areas of childhood development: cognitive; physical, including vision and hearing; language, speech and communication; social-emotional; or adaptive self-help skills. The eligible level of delay must have been either measured by Department-approved diagnostic instruments and standard procedures; or confirmed through informed clinical judgment of the multidisciplinary team if the child is unable to be appropriately and accurately tested by the standardized measures available. Activities used to determine clinical judgment include observation and parent report.

OR

The child has a physical or mental condition which typically results in developmental delay. EI eligible diagnoses (with ICD 9 codes) include: visual impairment (369.0-369.9), bilateral amblyopia (368.0), severe retinopathy or prematurity ROP 3+ (362.21), bilateral cataracts (743.3), myopia of 3 diopters or more (367.1), or albinism (270.2). If a child has a medical condition not approved by the Department as being an eligible condition, eligibility can be determined by using a medical diagnosis confirmed by a qualified family physician, pediatrician or pediatric sub-specialist as a medical condition with a relatively well-known expectancy for developmental outcomes within varying ranges of developmental disabilities.

OR

The child is identified at risk of substantial developmental delay, according to informed clinical judgment which means the multidisciplinary team confirms that development of a Department determined eligible level of delay (30% or greater) is probable if Early Intervention services are not provided because the child is experiencing a defined set of risk conditions.

IFSP DEVELOPMENT

After the child has been determined to be eligible through the evaluation process, each of the Early Intervention services should be considered to meet the child's overall developmental needs. The most common services required for a child who is visually impaired or blind are assistive technology, orientation and mobility (*DTO&M*), counseling and home visits, service coordination, and Developmental Therapy/Vision services. Children with multiple impairments may need additional Early Intervention services.

It is important that the CFC staff refer the family to a team of professionals that includes vision specialists such as Developmental Therapy Vision (DTV) and Developmental Therapy Orientation and Mobility(DTO&M) for the provision of services . DTVs are early intervention credentialed providers who have a teaching certificate in vision. DTO&Ms are early intervention credentialed providers who have a degree in Orientation and Mobility. These providers can be located on the Cornerstone System under Developmental Therapy. Hearing and Vision Connections can assist in locating DTVs and DTO&Ms by geographic area (217-479-4324 or dhsrstj@dhs.state.il.us.) These vision specialists are responsible for insuring that the impact of the vision loss is considered as an important factor in the development and implementation of the Individualized Family Services Plan (IFSP).

Although Early Intervention cannot pay for all needed services and devices, it is important to assess the child's total needs. Service Coordinators should become familiar with what Early Intervention can and cannot pay for related to vision services and devices, as well as alternative funding sources such as the Division of Specialized Care for Children (DSCC). Upon learning a child has a visual impairment, it is required that the Service Coordinator contact the local DSCC Regional Office to determine if the child may have an eligible DSCC vision impairment.

FAMILY SUPPORT

Family support is as important as the child's intervention needs. Parents consistently report that their need for support was most significant during the time their child was first diagnosed as having an impairment of vision. A parent packet entitled "Supporting Parents" is available to Illinois families who have a child with a vision loss. This free resource will help families get started in gathering information and finding the supports they need as they begin to learn about their child's vision loss. Contact Hearing and Vision Connections (HVC) toll free at 877-731-8184 or go to their website for more information at <http://morgan.k12.il.us/ids/hvc>.

TRANSITION FROM EARLY INTERVENTION

As with all children in Early Intervention, transition activities begin at least six months prior to the child's third birthday. Each Special Education entity in Illinois employs a Teacher for Children with Visual Impairments to help meet the educational needs of students with vision loss. School districts should be made aware of a child's vision diagnosis so that these

specialized services can be utilized as needed.

DEAF-BLIND SERVICE GUIDELINES

Some children with a visual impairment also have a hearing loss. When a child has both a vision and hearing loss to a certain degree, they are considered deaf-blind. The definition of deaf-blindness used by the Illinois State Board of Education is: a visual impairment of 20/70 or worse, best corrected in the better eye; a cortical visual impairment; or the child exhibits a significant discrepancy between the use of his/her vision and his/her cognitive ability. This must be combined with a hearing loss of 26dB or greater, best aided in the better ear; a cortical hearing impairment; auditory processing deficit; or the child exhibits a significant discrepancy between the use of his/her hearing and his/her cognitive ability.

A child with both a vision and hearing loss face a unique view of the world. For a child who can see and hear, the world extends as far as his/her eyes and ears can reach. A child who is deaf-blind has a world that is initially much narrower. When a child is profoundly deaf and totally blind, his/her experience of the world extends only as far as the fingertips can reach.

As indicated in the definition of deaf-blindness above, many children considered deaf-blind have enough vision to be able to move about in their environment and recognize people, see sign language at close distances and even perhaps read large print. Other children have enough hearing to recognize familiar sounds, understand some speech and/or develop speech themselves.

Below is a list of many of the possible (but not limited to) etiologies of deaf-blindness:

Alport syndrome, AIDS, Asphyxia, CHARGE syndrome, CMV, Down syndrome, Duane syndrome, Encephalitis, Fetal Alcohol syndrome, Head injury/trauma, Herpes, Hydrocephaly, KID syndrome, Leber's syndrome, Marshall syndrome, Maternal drug abuse, Meningitis, Microcephaly, Norrie's Disease, Pierre-Robin syndrome, Rubella, Stickler syndrome, Stroke, Syphilis, Toxoplasmosis, Trisomy 13, and Usher syndrome

It is strongly suggested that the hearing checklist and vision checklist included in the vision and hearing guidelines be utilized whenever one of the above etiologies are known about a child or if there are any concerns regarding a child's vision and hearing.

If it is suspected that a child may have both a hearing and vision loss, or it has been determined that he/she does have a hearing and vision loss, a deaf-blind specialist should be included in the assessment and planning of the child's EI program in addition to the DTV and DTH. A deaf-blind specialist from Project Reach – Illinois Deaf-Blind Program can be contacted at: phone(630) 790-2474, TTY(800) 771-1232, or email: prc@aol.com.

DEFINITIONS

This section contains words or terms commonly used in the identification, evaluation, assessment, and service provision of children with significant vision loss or blindness.

ACCOMMODATION - the ability to change focus from a distance point to a near point and vice versa

ACUITY LOSS – the reduction of the ability to discriminate detail and, thereby, resulting in blurred vision

ALBINISM - full or partial lack of pigment, may affect eyes only or entire body; may cause abnormal visual development depending on the severity of the condition due to abnormal development of the macula of the eye

AMBLYOPIA - reduction in acuity, especially when there is no apparent pathologic condition of the eye. Amblyopia is often associated with strabismus or a significant difference in refractive error between the two eyes. Generally affects one eye. Often referred to as “lazy eye”.

ANIRIDIA - congenital, traumatic, or surgical total or partial absence of the iris

ANOPHTHALMIA - absence of one or both eye globes

APHAKIA - absence of the crystalline lens in the eye, most commonly due to cataracts which have been surgically removed

ASTIGMATISM - a refractive error where blurred vision is caused by an irregular curvature of the surface of the cornea or the internal focusing structures

BINOCULAR VISION - coordinated use of the eyes to focus and align on one object and to fuse the two separate images into one visual image

BLINK REFLEX - spontaneous eyelid blinking which occurs approximately every 5-10 seconds or is induced by sudden sounds or approaching objects

CATARACT - a condition in which the lens of the eye becomes cloudy, resulting in a reduction of acuity

CENTRAL SCOTOMA - loss of vision of objects or part of objects directly in the line of sight

COLOBOMA - incomplete closure in development of the lower parts of the eye such as the retina, lid or iris with frequent optic nerve involvement

CONGENITAL - present at birth

CONJUNCTIVITIS - inflammation of the membrane lining the eyelids and portions of the globe

CONVERGENCE - when the eyes turn inward to maintain the line of sight on a near object/word

CORTICAL VISUAL IMPAIRMENT (CVI) – (Also known as cerebral visual impairment.) Inability of the brain to receive or understand and process visual information regardless of eye health status. This may occur in the presence of a healthy eye.

DEPTH PERCEPTION - the ability to perceive the relative positions of objects in space

DETACHED RETINA - separation of retina from the layers of the eye to which it is normally attached.

DEVELOPMENTAL THERAPIST/VISION (DTV) - a certified Teacher of the Visually Impaired who holds a credential through the Early Intervention system

DIAGNOSTIC VISION EVALUATION – vision evaluation given by an ophthalmologist or an optometrist to diagnose and/or treat the visual status of the patient. (See appendix B)

DIPLOPIA - double vision

EARLY INTERVENTION PROGRAM – The Early Intervention (EI) Program is a statewide program of evaluation and assessment for infants and toddlers under three years of age and of services for those who have a disability, a 30 percent delay in development in any area, or are at risk of developmental delays. This program is federally funded, in part, through Part C of the federal Individuals with Disabilities Education Act (IDEA). Services are provided to assist eligible children to develop basic developmental skills. Parents provide most of the care needed to help their children develop, guided by therapists who serve their children. Children and families access the EI system through one of 25 Child and Family Connections (CFC) offices, which are funded by the Department of Human Services. To identify the CFC office in your area, call 800/323-4769.

ESOTROPIA – condition in which one or both eyes turn in

EXOTROPIA – condition in which one or both of the eyes turn out

EYE TEAMING - both eyes working together properly

FARSIGHTEDNESS - see hyperopia

FIELD LOSS - inability to see in certain directions relative to the central line of sight

FIELD OF VISION - the widest area that can be seen while looking straight ahead

FIXATION - to direct a gaze and hold an object in view

FOVEA - small depression in the macula of the retina; area of sharpest vision

FUNCTIONAL VISION EVALUATION – A vision evaluation administered by a vision specialist. Used to determine how an individual is able to use his/her vision. This helps to show what the individual can see in the everyday environment. (See appendix C)

GAZE SHIFT – process of looking from one object to another

GLAUCOMA - increased internal eye pressure with possible optic nerve damage and vision loss

HYPEROPIA - (farsightedness) a refractive error that is usually caused by the eyeball being too short front to back or focusing power is too weak. With this condition, one can see objects more clearly at a distance.

HYPERTROPIA - turning upward of one or both of the eyes

LEBER'S CONGENITAL AMAUROSIS – genetic disease that effects retinal cells causing a progressive loss of vision

LEBER'S OPTIC ATROPHY – A rare genetic disease resulting in progressive cloudiness in vision followed by field loss. This disease usually effects young males. Onset occurs late in childhood.

LEGAL BLINDNESS - central visual acuity of 20/200 or less in the better seeing eye with corrective lenses or a peripheral field loss in which the widest diameter of the field in the better eye is no greater than 20 degrees (14" diameter at 1 meter).

LIGHT PERCEPTION - ability to distinguish a light stimulus

LOW VISION - vision that cannot be corrected to normal with conventional lenses

LOW VISION AIDS - optical and non-optical devices prescribed for persons with visual impairment persons to maximize their visual skills

MACULA - the central area of the retina that surrounds the fovea and with the fovea comprises the area of most acute vision

MICROPTHALMIA - abnormally small eyeball, usually congenital, typically resulting in significant visual loss

MYOPIA - (nearsightedness) a refractive error caused by the eyeball being too long or focusing power too strong. With this condition, one can see close objects more clearly, but objects at a distance appear out of focus

NEARSIGHTEDNESS - see myopia

NYSTAGMUS - a condition that involves small involuntary rapid movements of the eyes from side to side, in a circular, jerk, or pendular motion, or a combination of these. It may be secondary to poor visual acuity or due to abnormality in brain function.

OPHTHALMOLOGIST - a physician (M.D.) who specializes in the diagnosis and treatment of the eye, performs surgery, and prescribes glasses, medicine or therapy

OPTIC ATROPHY - reduced ability of the optic nerve to send nerve impulses from the retina to the brain

OPTIC NERVE - the cranial nerve that is carries nerve impulses from the retina to the brain

OPTIC NERVE HYPOPLASIA (ONH) – congenital underdevelopment of the optic nerve

OPTICIAN - an individual who specializes in fitting, adjusting and dispensing glasses and other optical devices prescribed by the ophthalmologist or optometrist

OPTOMETRIST - an individual (O.D.) who specializes in the diagnosis and treatment of the eyes and related structures, and prescribes glasses, medicine, prisms, low vision devices and therapy

ORIENTATION AND MOBILITY (O&M) – a sequential process in which people with visual impairments are taught to utilize their remaining senses to determine their position within the environment and to negotiate safe movement from one place to another

ORIENTATION AND MOBILITY SPECIALIST (COMS) – a certified professional trained to teach orientation and mobility skills to people with visual impairment

ORTHOPTIC TRAINING - series of eye exercises to develop or restore binocular vision

PEDIATRIC OPHTHALMOLOGIST – an ophthalmologist (M.D.) with fellowship training in pediatric ophthalmology specializing in the diagnosis and treatment of the ocular problems in children, performs surgery, and prescribes glasses, medicine or therapy.

PEDIATRIC OPTOMETRIST – an individual (O.D.) who works with the pediatric population and specializes in the diagnosis and treatment of the eyes and related structures, and prescribes glasses, prisms, low vision devices and therapy. This is an optometrist who has completed additional training in order to work with the pediatric population.

PERIPHERAL FIELD- vision allowing the perception of objects and movement outside of the direct line of sight

PHOTOPHOBIA - abnormal sensitivity to light

PROSTHESIS - a substitute for a missing body part such as the eye

PTOSIS - a drooping of an eyelid

PUPILLARY RESPONSES - contractions or dilations of the pupil due to changes in brightness in the environment, or the distance a target is viewed

REFRACTION - the measurement of the eye to determine refractive errors and the need for prescriptive lenses

REFRACTIVE ERROR - a focusing error in the eye that prevents light rays from focusing accurately on the retina

REHABILITATION TEACHER - teachers trained to instruct persons (generally adults) with visual impairments in the use of compensatory skills and assistive technology that will assist an individual in living a safe, productive, and independent life

RETINA - innermost layer of the eye, formed of light sensitive receptors and nerves that connect the retina through the optic nerve to visual centers in the brain

RETINITIS PIGMENTOSA (RP) - a progressive degeneration, often hereditary, of the retina which leads to peripheral and eventually central field loss

RETINOBLASTOMA - the most common malignant intraocular tumor of childhood occurring prior to the age of 5 years

RETINOPATHY OF PREMATURITY (ROP) - condition resulting from complications of low birth weight which may lead to reduced visual acuity, visual impairment or total blindness

SCANNING - the ability to visually search the environment with eyes alone or along with head movement

SCATTERED SCOTOMAS - patches of vision loss in visual field

STRABISMUS – eye muscle imbalance -- e.g. esotropia (eye turning in), exotropia (eye turning out) or hyper/hypotropia (eye turning up or down)

TEACHER FOR THE VISUALLY IMPAIRED (TVI) – an individual who has completed a four year teaching degree in the special education field specific to visual impairments

TRACKING - the ability to visually follow moving objects horizontally, vertically, or in an oblique plane

VISUAL ACUITY - ability of the eye to perceive detail; sharpness of vision

VISUAL DISCRIMINATION - the ability to accurately compare and contrast visual images

VISION SPECIALISTS - certified teachers of children with visual impairments, orientation and mobility specialists, Developmental Therapist/Vision (DTV) and Rehabilitation Teachers.

VISION THERAPY – also referred to as visual training or orthoptics. A treatment regimen to correct or improve specific dysfunctions of the visual system identified by standardized diagnostic criteria. This type of therapy can only be prescribed and administered by an optometrist or an ophthalmologist.

VISUAL EFFICIENCY – degree to which a child can use vision; a skill that needs to be developed with students who are visually impaired

APPENDIX A

SCREENING TOOL: VISUAL DEVELOPMENTAL

(for use by parents, DT's, DTV's and Service Coordinators)

Should a child referred to Child and Family Connections have a delay in the development of one or more of the milestones indicated in the following table, the child should be referred for a vision evaluation. **This screening tool can be used as part of the global evaluation process if screening results are not already available from another source. Vision and hearing screening are both reported on the *Individual Family Services Plan* under the domain of physical development.**

Step 1 Eye Exam ABC's

A "YES" on any of the following indicates that the child's eyes need to be examined by an eye doctor.

Appearance

- | | | |
|-----|----|--|
| Yes | No | Eyes are crossed, turn in or out, or move independently of one another...all of the time, part of the time or when the child is tired. |
| Yes | No | Red or crusted, drooping or swollen eyelids, frequent styes or watering |
| Yes | No | Pupils or eyes of different sizes |

Behavior

- | | | |
|-----|----|--|
| Yes | No | Closing an eye or covering it...squinting, frowning, blinking, rubbing or squeezing the eyes trying to see |
| Yes | No | Holding reading or writing materials in unusual positions...too close...too far...or tilted oddly |
| Yes | No | Turning the head to use one eye |
| Yes | No | Trouble keeping place reading |
| Yes | No | Tripping, stumbling or daydreaming excessively |
| Yes | No | Avoiding visual concentration |

Complaints

- | | | |
|-----|----|--------------------------------|
| Yes | No | Eye pain, headaches or nausea |
| Yes | No | Blurriness or inability to see |
| Yes | No | Words that "move" or "jump" |
| Yes | No | Double vision |

Step 2 Infant/Toddler Visual Developmental Sequence Checklist

Developmental Age	Visual Skills
Birth to one month	<ul style="list-style-type: none"> <input type="checkbox"/> Stares at lights, windows & bright walls <input type="checkbox"/> Blinks when light is too bright <input type="checkbox"/> Pupil gets smaller when light is shone in either eye, both pupils get equally larger when lights are turned down. <input type="checkbox"/> Looks at faces briefly <input type="checkbox"/> Looks briefly at objects placed in field of vision. May momentarily stop activity such as sucking or moving. <input type="checkbox"/> Eyes turn the opposite direction that head turns or tilts. This reflex is inhibited after the first few weeks as child's fixation increases. <input type="checkbox"/> Seems to focus best on objects 10 inches from face or further. <input type="checkbox"/> Follows or tracks a slowly moving object horizontally with eyes
One to three month	<ul style="list-style-type: none"> <input type="checkbox"/> Fixates on object within field of vision <input type="checkbox"/> Eye contact increases <input type="checkbox"/> Smiles in response to looking into face of a person who is talking or smiling <input type="checkbox"/> May smile at a picture or drawing of a face <input type="checkbox"/> Looks at high contrast patterns <input type="checkbox"/> Focuses on objects from 5 inches to as close as 3 inches <input type="checkbox"/> Visually inspects hands and nearby surroundings <input type="checkbox"/> Shows visual preference for people or objects <input type="checkbox"/> Will turn to an object brought in from the side <input type="checkbox"/> Can tilt head to look at objects above and below <p>NOTE: At this young age, eye movements are poorly coordinated and eyes may not always appear straight or work together <u>all the time</u>.</p>
Three to five months	<ul style="list-style-type: none"> <input type="checkbox"/> Looks at objects in hands momentarily <input type="checkbox"/> Most objects within reach are looked at and reached for <input type="checkbox"/> Visually attends to objects at distances from 5 - 20 inches <input type="checkbox"/> Follows or tracks an object vertically or a fast moving object <input type="checkbox"/> Moves head or eyes to sound <input type="checkbox"/> Looks for toys that go out of sight <input type="checkbox"/> Fixates on objects at 3 feet <input type="checkbox"/> Looks at small objects and details <input type="checkbox"/> Accurately reaches for objects

Five to seven months	<ul style="list-style-type: none"> <input type="checkbox"/> Binocular eye movements are well developed NOTE: Deviations should be followed medically <input type="checkbox"/> Prefers to look at more complex and real pictures <input type="checkbox"/> Looks in a mirror and may smile, pat, or kiss image <input type="checkbox"/> Visually discriminates strangers <input type="checkbox"/> Responds to a variety of facial expressions <input type="checkbox"/> Laughs at peek-a-boo games
Seven to twelve months	<ul style="list-style-type: none"> <input type="checkbox"/> Tilts head to look up <input type="checkbox"/> Tracks objects with eyes rather than just head <input type="checkbox"/> Fixates on facial expression and imitates <input type="checkbox"/> Reaches for small objects such as pieces of cereal <input type="checkbox"/> Recognizes some pictures
Twelve to eighteen months	<ul style="list-style-type: none"> <input type="checkbox"/> Identifies likenesses and differences <input type="checkbox"/> Makes linear marks on paper <input type="checkbox"/> Looks toward indicated objects when requested <input type="checkbox"/> Looks at picture books and turns pages
Eighteen months to three years	<ul style="list-style-type: none"> <input type="checkbox"/> Looks behind the mirror when looking at own reflection <input type="checkbox"/> Differentiates, discriminates and identifies familiar objects <input type="checkbox"/> Imitates simple actions <input type="checkbox"/> Imitates vertical, horizontal, and circular marks <input type="checkbox"/> Matches pictures to objects and pictures to pictures <input type="checkbox"/> Matches colors <input type="checkbox"/> Matches circle, square, and triangle <input type="checkbox"/> Identifies body parts on dolls or picture <input type="checkbox"/> Names or points to self in photograph

Note: This two step screening is part of a more in-depth Illinois Functional Vision Screening tool currently being used by multiple Illinois state agencies. View and download the screening tool on the Hearing and Vision Connections (HVC) website at <http://morgan.k12.il.us/isd/hvc> Free trainings are offered around the state through HVC on the use of the three-part Illinois Functional Vision Screening tool.

APPENDIX B

DIAGNOSTIC VISUAL EXAMINATION COMPONENTS

The basic evaluation will include the following areas:

AREA TESTED AND METHOD

- Complete case history - child and family vision history, information concerning the pregnancy, birth, and postnatal time periods, child's general health and development, previous specialized testing, and other special information about the child
- Visual acuity testing is conducted to determine if the child's acuity is developing normally, to identify if acuity is below the expected range, or if there is a difference between the two eyes. Since most children under three are unreliable on subjective testing, visual acuity testing is commonly conducted using the Teller Acuity Cards. This well accepted clinical method allows for assessing the visual acuity of each eye individually as well as both eyes together at a distance of 55 cm from the child. If the child were capable of labeling or matching pictures, then matching tests are possible (e.g., HOTV, Lea symbols, etc.). The advantage here is the Lea symbols are available for both near point and distance testing, Parents can be instructed to teach the child to name the symbols or point to the symbol when it is presented. Photo screening is used in some groups.
- Binocular alignment is evaluated with the prism cover test in a cooperative infant or toddler or the Hirshberg / Kappa /Krimsky tests in the less cooperative child.
- Ocular motility testing will investigate the child's ability to fixate on objects, ability to follow a slowly moving target, the ability to visually move from one object in space to another, and an observation of nystagmus, if present.
- Refractive error assessment is conducted with retinoscopy.
- External and dilated examination of the fundas of the eye (retina, etc.) and in some cases, an assessment of intraocular pressure.

APPENDIX C

FUNCTIONAL VISION EVALUATION COMPONENTS

A functional vision evaluation should include a majority of these assessment areas. The Developmental Therapist Vision will determine the appropriate test instruments and procedures for each child.

- Parent observations of directed behaviors, ocular and general health history.
- Pupil responses— constrictions or dilations of the pupil to changes in light
- Blink reflex—spontaneous eyelid blinking which occurs approximately every 5-10 seconds
- Convergence/divergence—the ability of the eyes to converge toward or away from each other as an object approaches or recedes
- Eye Preference—using one eye more than the other
- Peripheral fields (side vision)—the ability to see objects and movement outside of the direct line of sight (often difficult or impossible to perform on a young child)
- Visually directed reaching—the ability to see visual stimulation and reach towards it
- Fixation—directing a gaze and holding an object steadily in view
- Shift of gaze—smoothly looking from one object to another
- Muscle balance—alignment of the eyes
- Visual tracking—the ability of the eye to follow a moving object
- Visual scanning—the ability to accurately change fixation from one object in space to another object in space by use of the head and eyes to search the environment
- Visual discrimination—the ability to accurately compare and contrast visual images

APPENDIX D

ORIENTATION & MOBILITY EVALUATION COMPONENTS

An Orientation and Mobility evaluation should include a majority of the assessment areas below. The DTO&M will determine the appropriate test instruments and procedures for the child.

- | | |
|--|-------------------------------|
| ✓Spatial awareness | ✓Mid-line |
| ✓Echo (sound awareness) | ✓Echo location |
| ✓Use of audition | ✓Position of chin |
| ✓Independent sitting | ✓Toleration of prone position |
| ✓Getting up from prone position | ✓Rolling |
| ✓Reciprocation crawl | ✓Cruising stage |
| ✓Affective domain: reaching out or exploration | |

Cognition includes the child's:

- Utilization of senses
- Vision: visual fixation, eccentric viewing angle, scanning, tracking
- Audition: reaction to sound; awareness of cause and effect sounds, turning toward sound sources, listening for and making echo sounds, exploration for/of sound sources; labeling of sounds with names of sources
- Utilization of conceptual skills
- Understanding of self (body awareness and imagery)
- Experiential consistencies for object permanence and spatial awareness
- Tactile curiosity and beginning processing and problem solving skills
- Identification of landmarks in frequented areas
- Climbing/spatial problem solving
- Motivated to move and solve own needs or waits for the "magic hand" to solve needs

Psychomotor variables include:

- Present motor levels: supine, prone, sitting, weight bearing and mannerisms

Affective

So often in the evaluation and observation process we are evaluating the learning environment at home. Children tend to rise to the levels of expectations of their nearest and dearest loved ones. Affective variables to look for:

- Does the child spend much of the day in the crib/play-pen or are these just his home-base reference points and he/she is free to move about?
- Is the infant carried around by parents throughout the day allowing the love and attachment bond as well as providing exposure to sounds?
- Is the attitude one of challenging and teaching the child or one of having a poor blind child?
- Are situations set up for the child to gain confidence and success or are incentives to move about not set up and even discouraged? Without incentives and positive feedback for even minor successes, there will be no desire to move physically or cognitively to increase independent movement.
- Do the parents think in an auditory/tactile mode? (Listen and feel differences that they can pass on to their child)
- Are there constant background noises (TV/radio) or does the child have time to attend to environmental sound and create/use ambient sound and echo.

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