

*Module:* **Visual Conditions and Functional Vision:  
Early Intervention Issues**

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## All Sessions

### Glossary

**Accommodation** Adjustment of the optics of an eye to keep an object in focus on the retina as the distance of the object from the eye varies.

**Achromatopsia (Monochromatism)** An autosomal-recessive cone disorder that is characterized by a severe deficiency in color and detail perception. There are many degrees of severity of achromatopsia. Cone monochromatism involves some cone function and normal visual acuity and is not associated with nystagmus and photophobia. Rod monochromatism involves the complete absence of cone function and is accompanied by poor vision, photophobia, and nystagmus.

**Albinism** Group of inherited, usually autosomal-recessive disorders with deficiency or absence of pigment in the skin, hair, and eyes, or eyes only, as a result of decreased melanin production. Associated with nystagmus, strabismus, astigmatism, and central scotomas.

**Amblyopia** Reduced visual functioning in one eye without discernable ocular abnormality. Associated with visual field reduction, limited or absent perception of depth, and vision loss in one eye. Commonly called “lazy eye.”

**Anesthesia** Loss of sensation resulting from the blocking of nerve function by pharmacological agents or from neurologic dysfunction.

**Aniridia** Rare, congenital condition in which the iris does not develop fully (partial to almost complete absence of iris) that is often associated with glaucoma or cataracts. Also associated with nystagmus, photophobia, fluctuating vision, and visual field reduction.

**Anophthalmia** Absence of the globe and ocular tissue from the orbit of one or both eyeballs (most individuals have some remnants of the globe). Sometimes associated with multiple congenital malformations.

**Anoxia** Absence of oxygen supply to an organ’s tissues despite adequate blood flow through the tissue. See Hypoxia.

**Aphakia** Absence of the lens. May be congenital or may follow cataract removal. Results in an inability to accommodate, which can lead to depth perception problems or peripheral field distortions. Corrective lenses are usually prescribed.

**Apraxia** Inability to execute a voluntary motor movement despite being able to demonstrate normal muscle function. Results from a problem in the cerebral cortex and is not related to cognitive ability or physical paralysis.

**Aqueous humor** Clear liquid produced by the ciliary processes and contained in the anterior and posterior chambers of the eye; nourishes the cornea, iris, and lens and maintains intraocular pressure.

**Asphyxia** Impaired or absent breathing.

**Assistive technology** Device or equipment that helps individuals with disabilities function more independently (e.g., CCTVs, magnifiers, augmentative communication devices, reading stands).

**Astigmatism** Condition of unequal curvature of the cornea or anterior or posterior surface of the lens, causing light rays to focus at various points on the retina. Associated with blurred vision.

**Axenfeld anomaly** Malformation of the eye manifested by the appearance of a white ring on the surface of the cornea, associated with high intraocular pressures.

**Binocular vision** Fusion of separate images received by the eyes into a single, three-dimensional image.

**Cataract** Ocular opacity, partial or complete, of one or both eyes that may prevent passage of light through the lens. Associated with reduced visual acuity, blurred vision, poor color vision, photophobia, and nystagmus.

**Central vision** Vision stimulated when the eyes fixate on an object so that its image is focused on the fovea centralis.

**Charge association** Particular grouping of associated congenital anomalies, including coloboma of the eye, heart anomaly, choanal atresia, retardation, genital anomalies, ear anomalies or deafness, renal anomalies, and retardation of growth or development.

**Chorioretinitis** Inflammation of the choroid and retina of the eye. Associated with central scotomas, reduced visual acuity, photophobia, strabismus.

**Choroid** Highly vascular layer of the eye between the sclera and retina that provides blood supply to the retina.

**Ciliary body** Thickened portion of the vascular tunic of the eye between the choroid and the iris; composed of ciliary processes, which produce aqueous humor, and the ciliary muscle, which maintains lens shape and intraocular pressure.

**Clinical low vision assessment** Evaluation of remaining vision and its use. The exam can determine distance and clarity of vision, size of readable print, existence of blind spots or tunnel vision, depth perception, eye-hand coordination, problems in contrast perception, lighting requirements for optimum vision, and the need for optical and nonoptical devices.

**Clinical vision exam** Series of assessments that measures an individual's ocular health and visual status to determine if there are any preexisting or potential vision problems and to determine the extent to which individuals are using their vision, performed by an ophthalmologist or an optometrist.

**Closed circuit television (CCTV)** Stand-mounted or handheld video camera that projects a magnified image onto a television monitor.

**Coloboma** Congenital malformation in which part of the eye—the choroid, iris, lens, optic nerve, or retina—does not form due to failure of fusion of the intraocular fissure (fetal tissue). A coloboma can occur as an isolated defect or it can be part of a multiple congenital malformation, such as the cat-eye syndrome, aniridia-Wilms tumor association, or trisomy 13. Associated with decreased visual acuity, nystagmus, strabismus, photophobia, and loss of visual fields.

**Color blindness** An abnormal condition characterized by the inability to clearly perceive different colors of the spectrum.

**Cone** Photoreceptor cell responsible for both color perception and visual acuity. Cells are concentrated in the macula.

**Cone dystrophy** Retinal abnormality that involves the progressive deterioration of cones. Associated with loss of color vision, photophobia, and reduced central vision.

**Congenital** Existing at birth.

**Congenital stationary night blindness** Hereditary retinal disorder characterized by the loss of rod function. Associated with poor night vision. See Night blindness.

**Conjugate gaze**     Parallel movement of two eyes to bring an object into view.

**Conjunctivitis**     Inflammation of the conjunctiva (mucous membrane covering the anterior surface of the eyeball and the posterior surface of the lids) causing tearing, discharge, and pain. Associated with photophobia, corneal ulcers and scarring, ptosis, refractive error, and blindness. Commonly called “pink eye.”

**Contrast**     See Luminance contrast, Light-dark contrast.

**Contrast sensitivity**     Ability to discern the difference in grayness and background.

**Convergence**     Coordinated inward movement of the eyes toward a common point of fixation to achieve binocular vision.

**Cornea**     Transparent tissue at the front of the eye that is primarily responsible for optical refraction.

**Corpus collosum**     Plate of nerve fibers connecting the right and left cortical hemispheres.

**Cortical/cerebral visual impairment (CVI)**     Temporary or permanent visual impairment caused by a disturbance in the posterior visual pathways or the occipital lobe of the brain that results in the visual systems of the brain not consistently understanding or interpreting what the eyes see. Associated with fluctuating visual function, inattention to visual stimuli, light gazing, difficulty discriminating figure-ground, central or peripheral vision loss, scotomas, photophobia, and eccentric fixations.

**Cryotherapy**     Therapeutic use of cold to destroy tissue.

**Crystalline lens**     See Lens.

**Cytomegalovirus (CMV)**     CMV, a member of the herpes virus family, can cause severe infection in patients with immune deficiency and in newborns when the virus is transmitted in utero. CMV is the most important cause of congenital viral infection in the U.S. Generalized infection may occur in infants; symptoms may include hearing loss, visual impairment, and varying degrees of mental retardation. Associated effects on vision include chorioretinitis (inflammation of the choroid and retina) and microphthalmia (small eyes).

**Delayed visual maturation**     Condition in which a child does not use vision during the first few months of life. Nystagmus may be present. Though the delay in visual function

may be related to anterior visual pathway abnormalities, magnetic resonance imaging studies will not reveal them. Visual function generally develops at 6 to 12 months. Delayed visual maturation can be diagnosed only retrospectively.

**Dendritic spines** Short outgrowths of dendrites (extensions of neurons) that relay electrical impulses in the brain.

**Depth cue** Information used by the brain to determine the relative nearness of objects. For instance, an object that obscures or overlaps another object is interpreted to be nearer.

**Dilate** To expand an orifice (e.g., pupil or lacrimal punctum).

**Diopter** Unit of measurement used to establish lens power and refraction.

**Diplopia** Double vision that can result from a variety of causes.

**Distance vision** Vision of objects 20 feet or more from the viewer.

**Dome magnifier** Device that allows the maximum amount of light to reach the surface under examination to produce a distortion-free, magnified image.

**Double vision** See Diplopia.

**Dycem** Brand name of nonslip plastic sheeting.

**Early Childhood Vision Consultant (ECVC)** Individual who has received training in working with young children with visual impairments and their families.

**Eccentric viewing** Compensatory process, such as turning the head, in which individuals force visual fixation on a functioning area of the retina other than the fovea.

**Electroretinogram (ERG)** Measure of the retinal activity produced by adequate light stimulus.

**Endocrine system** Body system that makes, releases, and regulates hormones.

**Enucleation** Surgical removal of a diseased or damaged eyeball, leaving eye muscles and remaining orbital contents intact.

**Environmental adaptation** Alteration of the surroundings to enhance visual efficiency. Also called environmental modification.

**Environmental assessment** Observation of visual functioning in daily settings and interactions.

**Esotropia** Misalignment of the eyes in which one or both eyes turn inward toward the nose. The most common form of strabismus in infants.

**Etiology** Cause of a medical abnormality.

**Exam under anesthesia (EUA)** Process of inspecting or testing the eye for evidence of disease or abnormality with the use of sedation.

**Exotropia** Misalignment of eye in which one or both eyes turn outward away from the nose.

**Eye-hand coordination** Ability to use eyes and hands together to locate, reach toward, touch, or pick up an object.

**Farsightedness** See Hyperopia.

**Figure-ground perception** Ability to separate an object from its background in the visual field.

**Fixate** To coordinate eye movements in order to focus an image on the fovea.

**Forced-choice preferential looking test** Assessment of vision in nonverbal or preverbal children in which patterned stimuli are presented and the direction of gaze is noted to determine resolution acuity.

**Formal tools and procedures** Tools and procedures that are standardized or commercially available, such as ISAVE (Langley, 1998), PAVII (Chen, Friedman, & Calvello 1989), Teller Acuity Cards (Vistech Consultants, Inc., 1990), and the LEA Symbol Test (Hyvärinen, n.d.).

**Fovea** Depression in the center of the macula that contains mostly cones and provides the sharpest vision.

**Functional vision assessment (FVA)** The systematic observation and assessment of visual and sensory behaviors to determine how individuals use vision in different activities and environments

**Functional vision assessment report** Written document that describes how a child uses vision in daily activities; includes recommendations for referrals, adaptations, and intervention.

**Geniculate body** A neural way station located at the upper end of the brainstem that relays visual impulses.

**Gestational age** Developmental age of a fetus.

**Glaucoma** Condition caused by excessive buildup of fluid inside the eye that puts pressure on the retina and causes damage to the retina and the optic nerve. Associated with fluctuating vision, peripheral field loss, poor night vision, photophobia, pain, and headaches.

**Head control** Maintenance of erect position of the head.

**Hemianopsia** Blind area in the right or left half of the visual field in one or both eyes. Also called hemianopia.

**Hyaloid system** Well-developed vascular network originating at the optic disc and extending to the lens; nourishes the lens during fetal growth.

**Hyperopia** Blurred near vision that occurs when the distance from the cornea to the retina is too short (caused by an eye that has a vertical oval shape or a cornea that is flatter than normal); farsightedness.

**Hypopituitarism** Diminished activity of the pituitary glands that leads to pituitary hormone deficiency. The lack of pituitary hormones (growth hormone, thyroid-stimulating hormone, adrenocorticotrophic hormone, prolactin, luteinizing hormone, follicle-stimulating hormone, antidiuretic, and oxytocin) results in loss of function in the glands or organs that they control.

**Hypoplasia** Underdevelopment of a tissue or organ.

**Hypoxia** Insufficient oxygen supply to an organ's tissues despite adequate blood flow through the tissue. See Anoxia.

**Incidence** The number of newly diagnosed cases in a given population over a given period of time.

**Indirect ophthalmoscope** Instrument used to examine the retina and vitreous.

**Informal tools and procedures** Nonstandardized methods and materials (e.g., natural observation, or items found within the home).

**Iris** Pigmented tissue of the eye, posterior to the cornea, that gives color to the eye and controls the amount of light entering the eye by varying the size of the pupil.

**Kinesthetic** Sense mediated by nerves located in muscles, tendons, and joints, and stimulated by bodily movements and tensions.

**Landmark** Object that marks locality.

**Lazy eye** See Amblyopia.

**Lea grating paddles** Resolution acuity paddles created by Dr. Lea Hyvärinen that use forced-choice preferential looking to estimate the acuity of nonverbal and preverbal children.

**Learning media** Range of materials and methods that are used to enhance sensory feedback to support learning (e.g., environmental sounds, verbal guidance, tactile cues).

**Learning media assessment (LMA)** Systematic assessment of a child's sensory responses and preferences; used to guide the intervention team in making informed and deliberate decisions on the range of sensory preferences needed to facilitate learning.

**Leber's congenital amaurosis** Genetic visual disorder characterized by reduced retinal function at birth as documented by an electroretinogram. Visual function can vary widely; however, profound or total visual loss is common. Associated with decreased distance vision, sensitivity to glare, and distortion of visual field.

**Legal blindness** In the U.S., visual acuity of 20/200 or less in the better eye with corrective lenses (20/200 means that a person must be at 20 feet from an eye chart to see what a person with normal vision can see at 200 feet) or visual field restricted to 20 degrees or less (tunnel vision) in the better eye with corrective lenses.

**Lens** Transparent lentil-shaped body behind the iris that is responsible for light refraction. When focusing on objects close to the eye, the ciliary muscles relax to make the lens round; when focusing on objects at a distance, the ciliary muscles contract to elongate the lens.

**Light-dark contrast** Variation in the amount of light reflected off of different areas of similar surfaces. For example, the corner of a wall may have high light-dark contrast when light strikes one side differently from the other, making it brighter.

**Light perception** Ability to distinguish between light and dark.



**Light projection** Ability to discern the source or direction of light.

**Literacy medium** Type of learning medium that is based on individuals' sensory preferences for reading and writing (e.g., print or braille).

**Localize** To identify the position of an object in space.

**Low vision** Significant reduction of visual function that cannot be fully corrected by ordinary glasses, contact lenses, medical treatment, or surgery. Individuals with low vision have the potential to use vision for daily tasks.

**Low vision specialist** Individual specializing in low vision (e.g., ophthalmologist or optometrist with credentials as diplomate or certified low vision specialist or an educator with certification from either the Academy for Certification of Vision Rehabilitation and Education Professionals or the PA College of Optometry)

**Luminance contrast** Difference in brightness between foreground and background. For example, high luminance contrast occurs when a black object is placed on a yellow background.

**Macula** Thin layer of nerve cells near the center of the retina with high concentrations of cones for detailed vision. The macula provides sharp, clear, central vision that allows a person to see form, color, and detail.

**Medial region of the visual field** Half of the visual field, from midline to the nose.

**Microphthalmia** Reduction in the size of one or both eyes as result of congenital malformation or disease. Associated with decreased visual acuity, photophobia, fluctuating visual abilities, cataracts, glaucoma, aniridia, and coloboma. Also called microphthalmos.

**Myelination** Formation of insulating fatty material around nerve fiber. Also called myelination.

**Myopia** Blurred distance vision that results from images being focused in front of the retina rather than on the retina due to an elongated eyeball; nearsightedness.

**Near vision** Vision of objects within 16 inches of the viewer.

**Nearsightedness** See Myopia.

**Neonatal intensive care unit (NICU)** Unit in a hospital that provides intensive care for premature and ill newborn babies.

**Neurological impairment** Disorder that involves impairment of the central nervous system, which is comprised of the brain and spinal cord.

**Neuroophthalmologist** Medical doctor who specializes in the neurological aspects of the visual system.

**Night blindness** Diminished rod function resulting in deficient visual acuity in dim light.

**NoIR** Brand of lenses designed to absorb potentially harmful sunrays and provide 100% ultraviolet protection.

**Nonoptical devices** Devices and adaptations that enhance a person's visual function without the use of optics (e.g., bookstands, sun visors, bold and felt-tip markers, and bold-line paper).

**Null point** Position of gaze that minimizes the eye movements associated with congenital nystagmus.

**Nystagmus** Rapid, rhythmic, involuntary movements the eyes in horizontal, vertical, circular, or mixed movements. Associated with reduced visual acuity, eye fatigue, and inability to maintain steady fixation.

**Occipital lobe** Posterior area of the cerebrum that receives, interprets, and recognizes visual stimuli.

**Occluder** An instrument such as a paddle or patch used for covering an eye during testing or treatment.

**Ocular motility** Movement of the eyes in different directions.

**Ocular pursuit** Ability of the eyes to track movements in various directions (e.g., vertical, horizontal, oblique, and circular).

**Ocularist** Professional who designs and fits artificial eyes and prostheses.

**Oculomotor apraxia** Difficulty controlling eye movements.

**Ophthalmologist** Medical doctor who specializes in the diagnosis of eye conditions and eye abnormalities and their medical and surgical treatments.

**Optic chiasm** Area where the fibers of the optic nerves from the nasal regions of the retinas cross and join with fibers coming from the temporal regions of the retinas.

**Optic disc** “Blind spot” in the back of the eye where blood vessels enter and the optic nerve connects to the retina.

**Optic nerve** Cranial nerve that conducts impulses for sight from the retina to the brain.

**Optic nerve atrophy** Degeneration of the optic nerve fibers causing loss of vision. Associated with decreased visual acuity, fluctuating vision, photophobia, and diminished visual perception.

**Optic nerve glioma** Nonmalignant tumor of the optic nerve or optic chiasm that progresses slowly and is present at birth. Associated with reduced visual acuity and protrusion of the eye(s).

**Optic nerve hypoplasia (ONH)** Underdevelopment of the optic nerve during fetal development, sometimes appearing as a small, pale or gray nerve head surrounded by a light halo. Associated with central nervous system or endocrine disorders, field defects, and nystagmus.

**Optic neuritis** Inflammation of the optic nerve. Associated with rapid onset of decreased vision, central field loss, blurred vision, pain, scotomas, and loss of color vision.

**Optical device** Lens placed between the eye and the object being viewed that increases visual efficiency (e.g., magnifier, microscope, telescope, etc.).

**Optician** Professional who makes and adjusts optical aids from refraction prescriptions supplied by an ophthalmologist or optometrist.

**Optometric vision therapy** Individualized treatment regimen prescribed in order to provide medically necessary treatment for diagnosed visual dysfunctions, prevent the development of visual problems, or enhance visual performance to meet defined needs of the patient. Optometric vision therapy includes visual conditions such as strabismus, amblyopia, accommodative dysfunctions, ocular motor dysfunctions, visual motor disorders, and visual perceptual (visual information processing) disorders.

**Optometrist** Person professionally trained to test the eyes and to detect and treat eye problems and some eye diseases by prescribing and adapting corrective lenses and other optical aids.

**Optotype chart** Instrument to test visual acuity using letters, numbers, or symbols by themselves or in rows.

**Orthoptist** Professional in ophthalmology who manages or treats dysfunctions of binocularity and ocular motility, as diagnosed by an ophthalmologist.

**Patch program** Therapy to prevent or treat amblyopia in which a patient's preferred eye is covered to improve vision in the other eye.

**Peripheral vision** Perception of objects or motion from the parts of the retina that are beyond the macula.

**Periventricular leukomalacia (PVL)** Injury to area of the brain near the ventricles, associated with prematurity and lack of oxygen.

**Phoria** Tendency of the eyes to deviate when fusion is suspended.

**Photocoagulation** Surgical procedure using a strong beam of light (laser) to treat a detached retina or to destroy abnormal blood vessels in the retina.

**Photophobia** Intolerance or sensitivity to light. Usually indicates other ocular disorders or diseases.

**Physical response** Movement of the body in reaction to a stimulus.

**Pincer grasp** Use of the index finger and thumb to retrieve objects.

**Pink eye** See Conjunctivitis.

**Polydipsia** Significant thirst that may be a symptom of diabetes.

**Polyuria** Excessive passing of urine.

**Premature** Gestational age of less than 37 weeks.

**Prevalence** Total number of cases of a disease or condition existing in a population at a given point in time.

**Prognosis** Expected outcome or course of a disease.

**Prosthesis** Artificial replacement of a part of the body.

**Ptosis** Drooping of the eyelid caused by paralysis or weak eyelid muscles. Sometimes associated with reduced visual field or amblyopia.

**Pupil** Opening of the iris. The iris controls the amount of light that enters the eye by constricting and dilating around the pupil.

**Pupillary response** Constriction or dilation of the pupil as stimulated by light.

**Refraction** Bending of light as it passes through materials of differing densities (as in a lens). A refraction test determines an eye's refractive error.

**Refractive error** Mismatch between the power of the eye's optical system and its length such that parallel light rays are not brought to a focus on the retina; associated with blurred vision, eye strain, and headaches. See Astigmatism, Hyperopia, and Myopia.

**Retina** Inner sensory nerve layer that lines the posterior two-thirds of the eyeball and converts light into electrical pulses for interpretation in the brain.

**Retina specialist** Ophthalmologist who specializes in diseases and surgery of the retina and vitreous.

**Retinal detachment** Separation of the retina from the choroid. Associated with central vision loss, blurred vision, scotomas, myopia, and possible loss of all vision.

**Retinitis pigmentosa (RP)** Progressive degeneration of the retina. Associated with night blindness, loss of peripheral vision, tunnel vision, decreased acuity, lack of depth perception, retinal scarring, and photophobia.

**Retinoblastoma (RB)** Malignant tumor of the developing retinal cells in young children; may require enucleation. The most common sign of retinoblastoma is a white pupillary reflex to light (leukocoria), while strabismus is the second most common sign.

**Retinopathy of prematurity (ROP)** Damage to the retina often associated with prolonged life-sustaining oxygen therapy of infants born prematurely; characterized by a discontinuation of normal retinal vessel growth and abnormal growth of new vessels. Associated with myopia, scarring and subsequent field loss, retinal detachment, glaucoma, and strabismus. Formerly known as retrolental fibroplasia.

**Retinoscope** Handheld instrument for measuring an eye's refractive error.

**Rod** Retinal photoreceptor that detects form, shape, and movement.

**Saturation** Amount of brightness or light intensity.

**Scan** To visually search across an area or different isolated areas.

**Sclera** Tough, white, opaque, outer covering of the eye that protects the inner contents from most injuries.

**Seizure** Sudden, involuntary change in behavior, muscle control, consciousness, or sensation.

**Sepsis** Presence of toxins in the blood or tissue; blood poisoning.

**Shaken baby syndrome (SBS)** Syndrome of various neurological and physical injuries induced by the violent shaking of an infant. Associated with retinal detachment, optic atrophy, and damage to visual pathways in the brain.

**Shape constancy** Concept that an object retains the same shape even though its shape might appear to change when viewed at different angles.

**Shift of gaze** Alternation of eye fixation from one object, person, or event to another.

**Size constancy** Concept that an object remains the same size even though it appears smaller at a distance.

**Slant board** Angled, adjustable working surface that helps to reduce eye strain and back and neck pressure; a reading stand.

**Snellen chart** Chart that contains rows of standardized letters, numbers, or symbols; routinely used to assess visual acuity at a distance of 20 feet.

**Stargardt's disease** Hereditary condition that involves the progressive deterioration of the cone cells of the macula. Associated with central vision loss.

**Stereopsis** Process by which separate images from two eyes are successfully combined into one three-dimensional image in the brain.

**Strabismus** Extrinsic muscle imbalance, often secondary to other visual impairments, that causes misalignment of the eyes (upward, downward, toward the

nose, or away from the nose). Associated with loss of depth perception, fatigue, and eye strain.

**Sun lens** Lens that decreases glare in the environment and provides protection from harmful ultraviolet rays.

**Teacher of children with visual impairments (TVI)** Individual who has received training in the education of children and young adults with visual impairments.

**Teller Acuity Card (TAC) set** System of 17 cards for measuring resolution acuity in infants, young children, and individuals who cannot respond verbally to standard acuity measurements. Each card contains a black-and-white grating located to one side of a central peephole. The tester assesses the subject's preferential looking response to cards with increasingly finer gratings until no preference is observed.

**Temporal region of the visual field** Half of the visual field, from midline to the side of the head.

**Teratogen** Toxic agent that can cause birth defects in fetuses.

**Tracheotomy** Surgical procedure of incising the trachea through the neck to relieve upper airway obstruction and facilitate ventilation.

**Trachoma** Chronic infectious disease of the conjunctiva and cornea. Associated with photophobia, pain, tearing, and blindness.

**Track** To visually follow a moving object.

**Transdisciplinary model** Service delivery model based on the collaboration of the primary service provider and professionals from different disciplines (e.g., occupational therapist, speech-language pathologist, physical therapist) involving role release.

**Tropia** Apparent deviation of the eye when the eyes are open and uncovered.

**Trunk stability** Ability to maintain an erect posture of the trunk.

**Tunica vasculosa lentis** Embryonic blood vessel network covering the back of the lens until the fifth month of gestation.

**Vascular endothelium** Layer of cells that lines the vascular system.

**Vascularization** Development of blood vessels in tissue.

**Vision** Ability to perceive and discriminate among objects by means of sight. Vision involves fixation and eye motility, accommodation, convergence, visual perception, and visual-motor integration.

**Vision simulator** Lens designed to produce effects similar to those of various visual impairments in order to demonstrate the functional impact of vision loss.

**Visual acuity** Ability to identify and resolve fine details.

**Visual attention** Establishment of visual contact with a stimulus over a period of time.

**Visual awareness** Ability to detect a visible but unexpected stimulus when visual attention is elsewhere.

**Visual clutter** Combination of images and background that causes visual confusion.

**Visual evoked potential (VEP)** Measurement of changes in the visual cortex as light enters the eye; used to detect defects in the retina-to-brain nerve pathway.

**Visual field** Extent of area seen by the eye as it fixates straight ahead; measured in degrees away from fixation.

**Visual field loss** Inability to see part of an area of view when looking straight ahead.

**Visual function** Use of vision for activities of daily living.

**Visual impairment** Abnormality of the visual system that affects daily living activities. Typically, eligibility for services is based on visual acuity of 20/70 or worse in the better eye or visual field loss of 80% or more.

**Visual maturation** Process of visual development.

**Visual motor skill** Motor behavior elicited from visual input.

**Visual orientation** Awareness of one's position in space through use of the sense of sight.

**Visual processing** Interpretation of visual input by the visual cortex.

**Visual system** Sensory system responsible for vision, consisting of the eye, retina, optic nerve, optic chiasm, and visual cortex.



**Vitreous humor** Transparent, gelatinous mass that fills the rear of the eyeball between the lens and the retina. Also called vitreous gel.

**Xenon** Gas used in certain photocoagulators.