Vision Screening Certification Study Guide
Lions KidSight USA

Saving Kids’ Sight

25 Million Kids Need You, So Get Involved Today!

Lions of the USA are pleased to announce Lions KidSight USA, a nationwide program to safeguard the vision of children aged 6 months through 6 years.

According to educational experts, 80% of learning is visual. So if a child can’t see well, he can’t learn well. Yet most young children don’t get their vision screened until they have problems learning or paying attention in school. By then, it may already be too late. Unless vision problems are detected early and corrected, they risk becoming permanent by age 7.

Lions in the USA already screen more than 500,000 kids per year through state-wide and local programs often known as “KidSight.” Lions KidSight USA is a national coalition that brings together Lions programs that screen kids from 6 months to 6 years of age in order create a coordinated national program.

Our mission is to ensure eye screening and follow-up care is given to all kids because every child deserves to learn and see the world clearly. To do this, we will work with Lions to increase the number of screening programs around the country in order to reach more children when it is possible and where it is needed.
Certification Objectives

➢ The basics about vision screening
➢ Conduct screening using plusoptiX S12
➢ Validate results
➢ Provide follow-up to ensure treatment

Facts about Children’s Vision

➢ Vision disorders are the most prevalent disabling childhood conditions
➢ Visual impairment affects 5-10% of preschool age children
➢ Undetected vision problems affect physical ability and self-esteem
➢ Less than 21% of preschool-age children have their vision screened
Vision screening, with **appropriate follow-up care**, is critical to the welfare of children

- 80% of what a child learns is visually acquired
- Children think that their own limited vision is normal
- Vision disorders don't hurt
- Vision disorders may lead to Amblyopia

**Screening vs. Examination**

**Screening**
- Qualified vision screener
- Identifies most problems in early treatable stages
- Results in referral to an eye care professional

**Examination**
- Eye care professional
- Examines for eye disorders and disease
- Diagnoses problems
- Prescribes treatment
Refractive Power vs. Visual Acuity

Refractive Power and Visual Acuity are two different things:

- Visual acuity tells us the eye’s ability to distinguish small details.
- plusoptiX identifies some conditions which cause reduced acuity, one of which is refractive error or glasses prescription.
- Since reduced acuity may be the result of many conditions, the glasses prescription cannot be used to predict visual acuity.

Vision Screening Event vs. Vision Screening Program

Vision Screening Event
- One time/random coverage
- No or only limited follow-up of referrals
- Inconsistent documentation

Vision Screening Program
- Aims to screen all children regularly
- Close follow-up and treatment support
- Centralized documentation and statistics

A vision screening program may apply for an LCIF Standard Grant for assistance in equipment purchase. Some Multiple Districts have foundations with grant processes.
ABC’s of possible eye problems in children

Appearance
- Eyes crossed – turning in or out
- Reddened eyes
- Watering eyes
- Encrusted eyelids
- Frequent styes

Behavior
- Body rigidity while looking at distant objects
- Placing head close to a book or desk
- Avoiding close work
- Excessive blinking
- Tending to rub eyes
- Squinting or Head tilting
- Closing or covering one eye

Complaints
- Clumsiness
- Headaches
- Nausea or dizziness or light sensitivity
- Burning or itching of eyes
- Sees blur when looking up from close work
- Seeing objects double
Common Eye Problems

Refractive Error

Defect in optics of eye resulting in lack of precise focus of light rays on retina causing blurred image

- Nearsightedness (Myopia)
- Farsightedness (Hyperopia)
- Astigmatism

Amblyopia

Reduced vision in an eye that has not received adequate use during early childhood

- Affects 2-3% of population
- Results in permanent vision loss, if not treated early
- Caused by Anisometropia (unequal refractive error), strabismus or other factors

Strabismus

Eyes that are misaligned or not straight

- Affects one or both eyes
- Constant, intermittent, or alternates eyes
- Affects about 2% of population
- Results in permanent vision loss, if left untreated

Other Conditions

- Cataracts (clouding of the lens)
- Ptosis (drooping of upper lid)
What are we Screening For?

**Anisometropia**
compares refraction of both eyes; significant difference of refractive power between the eyes

**Astigmatism**
checks corneal curvature; results in blurred vision

**Myopia**
checks nearsightedness

**Hyperopia**
checks farsightedness

**Anisocoria**
compares pupil sizes of both eyes; difference in pupil size between the eyes

**Corneal reflexes**
checks symmetric eye alignment; a deviation in gaze will show a turning of the eye (strabismus)
Conduct Screening using plusoptiX S12

- Setting up the screening location
  - Be inside and away from direct sunlight
  - Be away from noise and distraction
  - Have space for required 3.3 ft distance

- Consent – opt in or opt out

- Photoscreening using S12 – Materials and Equipment
  - Fully charged plusoptiX S12 screener
  - Power cord and/or extra batteries
  - Black umbrella and sunglasses
  - Chairs for screener and subject
  - Parental consent forms or class list

- Data Entry
  - Choose validated referral threshold setting 4.
  - Referral criteria is AGE based. Entering the child’s age or Date of Birth (DOB) is required.
  - S12C: Enter DOB, First Name, Family Name or enter DOB and ID
  - S12R: Select Age
**Tips and Tricks for screening**

- Surfboard stance lets you move easily
- Screen babies over parent’s shoulder
- The child must look at the camera lens – say it’s a video game
- If the pupils are too small (<4mm), ask the child to wiggle their toes – Pupils will dilate

**Validation of Results**

- **Pass**
  - All readings are below criteria thresholds
- **Refer**
  - One or more readings are above criteria thresholds
- Measurement incomplete
- Unable to obtain reading
  - Pupils size - too small or too large
  - Ptosis – drooping eyelid covering part of pupil
  - Opacity such as cataract, scar tissue, etc.
  - Eye turn (strabismus)
  - Child looking away from camera
  - Distance from camera incorrect
  - Camera not level and flush with child’s eyes
Follow-up: Include on consent

- Determine in advance of the screening how referrals will be managed and what resources are available.
- Without additional effort from the screening group, only 33% of referrals follow through with an appointment.
- Successful vision screening = Screening + Follow-up + Treatment
- Early treatment is crucial – it saves sight and sometimes lives!

Certification Process

- Attend training
- Complete test
- Submit three examples of successful measurements.
- Email to c.mcdowell@plusoptix.com

Certified Vision Screener

- Demonstrated skills and knowledge
- Certificate and Pin
- Train others