



Vision Screening Requirements and Guidelines for Preschool and School-Aged Children 2017



Department of
Health



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Introduction to Vision Screening Guidelines for Children

Childhood vision disorders are prevalent and are a significant public health problem. Early identification, diagnosis and correction of children’s vision disorders are essential parts of all child health programs. The early detection and treatment of vision disorders give the visual system and brain an opportunity to develop normally and prevent permanent vision loss, thereby giving children a better opportunity to develop educationally, socially, and emotionally (National Center for Child’s Vision and Eye Health).

According to Bright Futures for the preschool-aged child, 5% to 10% have vision problems, including 2% to 5% with strabismus or amblyopia. Among school-aged children and adolescent children, more than 10 percent have refractive errors. (American Academy of Pediatrics. Vision. In: Tanski S, Garfunkel LC, Duncan PM, Weitzman M, eds. Performing Preventive Services: A Bright Futures Handbook. American Academy of Pediatrics; 2010). In addition to detecting potential vision problems, vision screening programs are valuable in raising the awareness of parents, teachers, child care providers and the community about the importance of eye care.

The Ohio Department of Health (ODH) stresses that a vision screening, while a valuable public health procedure, is not a substitute for a complete Ophthalmological/Optometric examination; however, to further ensure asymptomatic children with vision disorders and difficulties are detected early, it is important to utilize uniform and evidence based screening procedures as an essential part of a comprehensive approach to children’s vision and eye health.

ODH sets the requirements for what grades are routinely screened each year; what equipment is acceptable to use; what specific vision tests are needed to perform the screenings; and what criteria should be used for referral and recommendations for follow up. Appendix A contains a complete text of state law pertaining to vision screening programs. ODH’s guidelines and requirements governing vision screening programs were reviewed and recommended by the Ad Hoc Vision Advisory Committee and approved by the Medical Director and Director of Health.

Vision Screening Goals and Objectives

The ODH goals of a school vision screening program are:

- Provide training and equipment for vision screeners.
- Early detection and identification of suspected vision disorders in children with appropriate referral for diagnosis and treatment.
- Access to professional eye care for all children with suspected vision problems, regardless of financial limitations.
- Education for children and their parents/guardians about the development of vision, vision disorders and eye safety.
- Distribution of vision resources (Appendix C)

The activities of a school vision screening program that are necessary to accomplish the goals listed above are: (All material below should be sent in the family’s preferred language.)

- Notify parent/guardian about the importance of healthy vision and vision screening activities prior to child’s vision screening via school newsletter, handbook, website, note, or email.
- Remind parent/guardian to have their children bring corrective eyewear (eyeglasses or contact lenses) to school on day of screening.
- Perform vision screening according to ODH’s guidelines and requirements.
- Notify parent/guardian of the child’s vision screening results and the need for further examination; if necessary.
- Provide referral assistance and follow up to children who need a comprehensive eye exam by an optometrist or ophthalmologist.
- Provide resources for parents/guardian who need assistance with locating providers or assistance with financing exam or glasses. (Appendix C)
- Inform educational staff of the child’s vision screening results if necessary.
- Report vision screening data annually to ODH by **June 1**. (Form L)

Understanding Health Equity and Health Disparities

The Ohio Department of Health (ODH) is committed to the elimination of health inequities. Groups in Ohio experience a disproportionate burden with regard to the incidence, prevalence and mortality of certain diseases or health conditions. These are commonly referred to as health disparities. Health disparities are not limited to one disease or health condition and are measurable with various public health data. Vision disparities affect all populations. African Americans have twice the expenditures for eye or vision related emergency services for children and more than a third of Latino adolescents have inadequately corrected refractive errors². American Indians/Alaska natives have a higher prevalence of astigmatic anisometropia or having two eyes with a different refractive power, which causes unequal focus between the two eyes³. Asian American and Pacific Islanders have a higher population of nearsighted individuals, one of out of five reported to be nearsighted⁴.

As noted above, all minority populations are affected by vision impairment. Preschool children with visual impairment in 2015 included more than 174,000 children from age 3 to 5 in the United States. Projections for 2060 suggest that the largest portion of visual impairment in preschool is projected to occur among multiracial children⁵.



Summary of State Laws Pertaining to Vision Screenings

- If the board of education or the board of health offers services by a physician or a nurse in the school, it must provide vision screenings for children in accordance with the requirements set forth by ODH in R.C. 3313.69 (Appendix A).
- By November 1, a student enrolled for the first time in either kindergarten or first grade must be given a vision screening in accordance with the requirements set forth by ODH in R.C. section 3313.673 (Appendix A). The board of education may provide any elements of the screening program itself, contract with any person or governmental entity to provide any such elements or request that parents take the child to obtain any such elements from a provider selected by the parents.
- Boards of education and boards of health, in providing vision screenings, must use devices and procedures approved by ODH. The procedures for conducting screening include, but are not limited to, age or grade levels to be screened, tests to be used and criteria for referral in R.C. 3313.69 (Appendix A).
- Boards of education and boards of health that provide vision screening must keep, on forms furnished or approved by ODH, accurate records of the tests and of the measures taken to treat problems identified through the screening in R.C. 3313.50 (Appendix A).
- Boards of education and boards of health must make available to official state and local health, education and human service ODHs and agencies statistical data from the records of the vision screenings in R.C. 3313.50 (Appendix A).
- Boards of education and boards of health must make available to the same agencies listed in the paragraph above individual records only in cases where there is evidence that no measures have been taken to treat problems determined by the screenings in R.C. 3313.50 (Appendix A).
- Boards of education and boards of health must make available to school authorities individual records in cases where they are deemed essential in establishing special education facilities for the visually impaired in R.C. 3313.50 (Appendix A).
- Boards of education and boards of health if reporting the results of a failed screening in writing must provide the results in a sealed envelope addressed to the parent or guardian in R.C. 3709.22 (Appendix A).

Individualized Educational Plan (IEP)

The information below represents both Ohio Department of Health and Ohio Department of Education (ODE) agencies requirements for IEP.

- In accordance with the R.C. 3323.19, (K)(3)(c) Initial IEP; Provision of Services: Once a student begins receiving services for the first time under an IEP, the school district in which the student is enrolled shall notify parent/guardian that the student is required to undergo a comprehensive eye exam within three months.
- In the case of a student who is blind or visually impaired, the IEP team must ensure that the requirements for IEPs for children with visual impairments are implemented as provided in R.C. 3323.011 (L)(1)(a)(iv) and (b)(iii)(b).

Tracking IEP for ODE

Tracking the Eye Exams Required by S.B. 316

Student ID	Date Initial IEP's Services Began	Date Parents Notified of Requirement for Eye Exam	Date of Eye Exam	Special Circumstances Preventing Exam

Student ID — This can be a district ID, the child’s name, or the SSID. Using the EMIS SSID will make it much easier for you to troubleshoot if the count’s of IIEPs reported here do not match the counts of IIEPs in EMIS.

Date Initial IEP’s Services Began — For all Initial IEP’s written after July 1, 2014. This should match the beginning date in EMIS.

Date of eye exam — S.B. 316 requires exam within nine months prior to IEP implementation can be as simple as a note from parent citing date of exam or a summary of a phone conversation.

Special circumstances preventing exam — If there is no date of an eye exam, this information must be provided. Examples are parental refusal, parental non-response, hospitalization, incarceration, lack of resources. Circumstances are reported by the parent and documentation can be as simple as a note from parent citing or a summary of a phone conversation.

Screening Components

A screening program should include the following components:

Establish policies that ensure all parents/guardians receive educational materials which respect their cultural and literacy needs. These materials should communicate the importance of:

- Notification about the importance of healthy vision as it relates to the ability to learn and the impending vision screening is sent to parent/guardian prior to the child’s vision screening via school newsletter or website, note, email. Utilize the School Vision Screening informational Letter. (Letter A)
- Good vision for their child now and in the future including eye safety.
- Scheduling and attending a comprehensive eye exam if their child does not pass vision screening. (Form J)
- Increased risk for vision problems in defined high-risk populations.

Parental Permission

Obtain parent/guardians permission to:

- Provide screening results to the child’s eye doctor and primary care provider by utilizing the School Vision Screening Referral. (Letter B)
- Receive eye exam results for the screening program file. Utilize the Eye Specialist Report (Form J) which will provide additional details.

Evaluation

Evaluate the effectiveness of your vision screening program annually by evaluating key questions below. Utilize the Evaluation Tool. (Form A)

Key questions of interest to pose:

1. What percentage of the required population was screened?
2. Of those screened, what percentage was referred for an eye examination?
3. Of those referred, what percentage of referrals received a comprehensive eye exam?
4. If the number of children referred does not match the number of referrals completed, identify what the barriers to follow up there may be?
5. Of those identified barriers to follow up care what strategies should be implemented to increase follow up?
6. Did the vision screener utilize ODH approved equipment? As guidelines are revised it may be necessary to replace equipment (for preschool children summary page 40 and for school-age children summary 68 for approved equipment.)

National Recommendations

The U.S. Preventive Services Task Force (USPSTF) is an independent, volunteer panel of national experts in prevention and evidence-based medicine. (6) The Task Force works to improve the health of all Americans by making evidence-based recommendations about clinical preventive services such as screenings, counseling services, and preventive medications.

Bright Futures is a national health promotion and prevention initiative, led by the American Academy of Pediatrics and supported by the Maternal and Child Health Bureau, Health Resources and Services Administration. *The Bright Futures Guidelines* provide theory-based and evidence-driven guidance for all preventive care screenings and well-child visits.

The National Center for Children’s Vision and Eye Health (NCCVEH) is an effort funded in part by the HRSA-Maternal and Child Health Bureau to improve the public health system that supports children’s vision and eye health in the United States.

The ODH recognizes the importance of national recommendations for vision screening. Therefore, national recommendations were presented to the Ad Hoc Vision Advisory committee for consideration.

Vision Screeners

Vision screening for children may be conducted by:

- Physician.
- Ophthalmologist.
- Optometrist.
- Optician.
- Registered Nurse (RN).
- Nurses may delegate vision services to a trained unlicensed personnel in accordance with the Standards of Delegation defined in the Ohio Administration Code (OAC) 4723-13.
- Vision screeners trained and certified in the ODH approved vision screening requirements and guidelines.

An opinion rendered by the ODH’s Legal counsel in 1991 concluded that professionals who provide vision screening services to preschools and schools, whether as volunteers or contract personnel, must follow the screening requirements and methodologies approved by ODH.

Vision Screening Limitations

Vision screening is an effective method of identifying asymptomatic children at risk for vision impairment. Vision screening is utilized to identify risk for vision disorders and does not diagnose vision disorders.

Screening programs should stress the screening does not take the place of a comprehensive eye exam and will not detect all vision problems. Screening will produce both over referrals and under referrals; the criteria for referral have been set to keep both the over referrals (those with no problem on examination) and the under-referrals (those who are missed) at a minimum.

Parents/guardians of children screened should be informed of the **limitation of the screening**. A child who has any of the conditions listed in direct observation, those who are untestable and any who should not be included in the screening program should be referred immediately for a comprehensive eye exam by an Optometrist or Ophthalmologist and should not proceed with the vision screening.

Infection Control

Sanitation practices are an important part of the screening process. Be sure to take appropriate measures to minimize the spread of infection and disease. Below are suggested steps for infection control.

Wash hands with soap and water before beginning screening. Antimicrobial hand gel may also be used.

ODH recommends the usage of a low-PH quaternary ammonia chloride based cleaner for general cleaning equipment (e.g. Sani Cloth). This type of cleaner is a broad-level disinfectant with disinfectant ability against bacteria, fungi and viruses. Occluders should be disinfected after contact with each child.

Cleaning the Stereopsis Polarized Glasses — Avoid touching the lenses. To clean the lenses, wipe them with a regular soft dry cloth. Clean the stems and frames in the between uses with antibacterial wipes.

Cleaning the SureSight Vision Screener — Do not sterilize SureSight or any of its components. All windows on the SureSight can be cleaned with a soft cloth moistened with 70 percent Isopropyl Alcohol or any standard window cleaner. Keep front window clean to insure proper function.

Cleaning the Retinomax Vision Screener — Cleanse the headrest with antibacterial wipes.

Finally, children whose eyes are red or draining should not be screened.

Children to be Screened

Preschool children:

Children attending a school-based program shall be screened annually for each year he/she is enrolled in preschool. Children who cannot be screened using the methods described in this document should be referred for a comprehensive eye exam by an optometrist or ophthalmologist.

School-aged children:

School-aged children must be screened in grades: Kindergarten, first, third, fifth, seventh, ninth and eleventh.

By November 1, a student enrolled for the first time in either kindergarten or first grade must be given a vision screening in accordance with the requirements set forth by ODH in R.C. section 3313.673 (Appendix A).

In addition, the following school children should be screened annually or upon occurrence:

- Children new to the school with no previously documented vision screening.
- Children referred by a teacher or other school personnel.
- Children absent during the previous vision screening.
- Children whose parent/guardian request a vision screening.



Children Who Should Not be Included
In The School Vision Screening Program

- Untestable:**
Children who are unable or refuse to complete screening are considered untestable. Children with cognitive, physical or behavioral issues likely to preclude rescreening are to be referred directly for a comprehensive eye exam. These children are more likely to have vision problems than testable children and thus should be referred. Utilize the School Vision Screening Referral letter (Letter B).
- Initially Known Diagnosed and Reported Disorders:**
Children should be referred directly for a comprehensive eye exam if the screener is aware of reported disorders such as ADHD, Autism Spectrum Disorder, Communication Disorders, Intellectual Disabilities, Language Disorders, Motor Disorders, hearing impairment, motor abnormalities such as cerebral palsy, Down syndrome, cognitive impairment, children with systemic diseases or using medications known to cause eye disorders, those with a family history of a first-degree relative with strabismus or amblyopia, and children born prematurely at less than 32 completed weeks of gestation. Utilize the School Vision Screening Referral letter (Letter B). If the child has an existing relationship with an eye care provider and has received an eye exam within the last 12 months the child should follow the eye care providers treatment or be referred back to the provider if a vision concern emerges.
- Parent/Guardians Refusal:**
If parent/guardian does not wish for his/her child’s vision to be screened, the school must have a written letter of refusal for every required year of screening in child’s health record from parent/guardian. Utilize the Screening Waiver Letter (Letter E).
- Eye Exam Reported:**
For children who should not be included in the school vision screening program, the appropriate referral and follow up with parent/guardian is important to ensure the child is under the care of a primary care provider, Optometrist, or Ophthalmologist. Record of a current (within the last 12 months) vision exam should be in the child’s file. Utilize the Eye Specialist Report From (Form J).
- Pediatrician Screening Reported:**
For children who have seen their pediatrician you may exclude them if they provide the completed Pediatric Screening form (Form K). Form K must be submitted in order to exclude a child from the vision screening program based on a pediatrician’s recommendation. If not received, the child should be screened by the vision screening program.

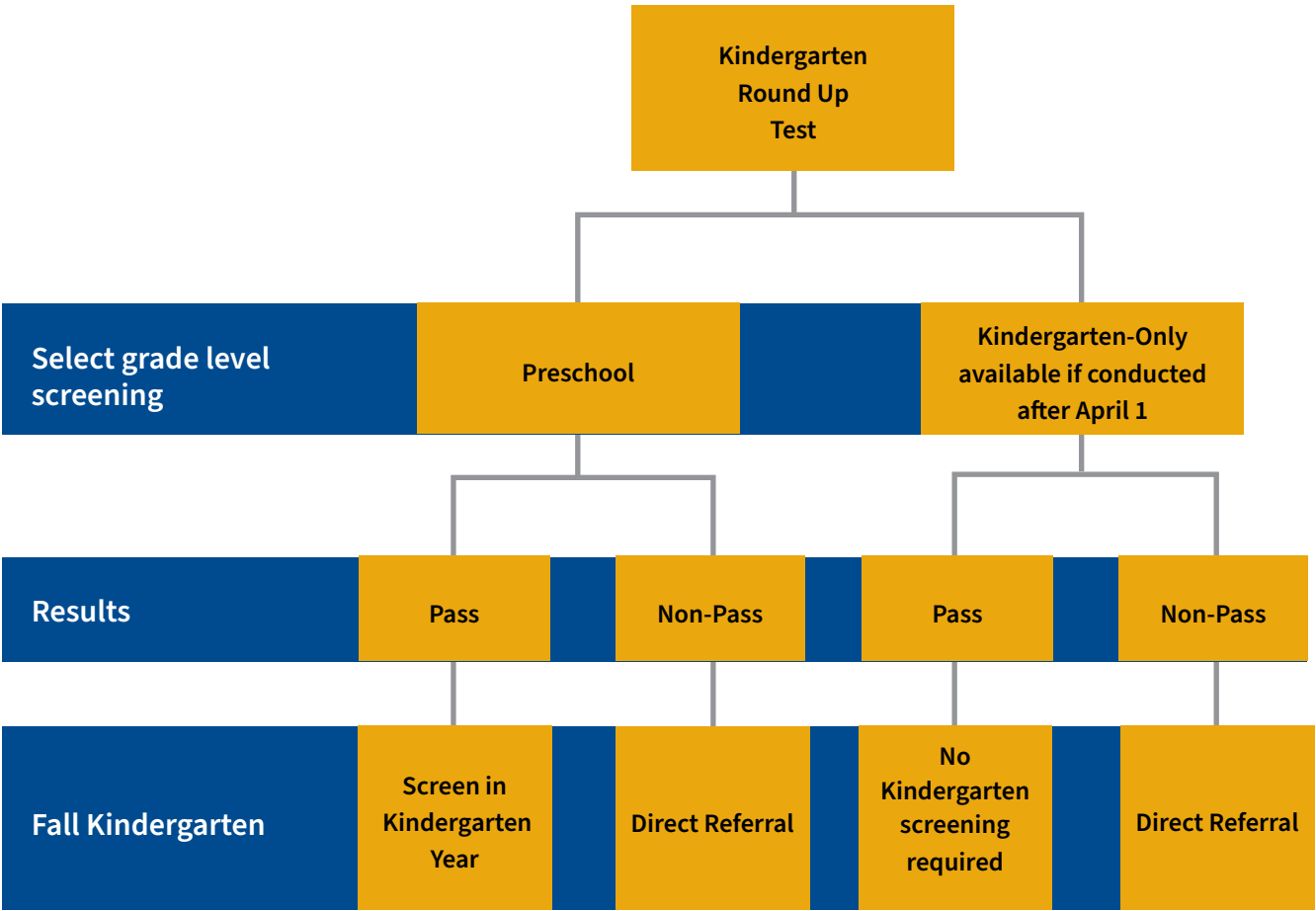
Mass Vision Screenings

ODH does not recommend mass screenings which consist of large number of children convened in one place at the same time. Ideal screening settings should include a room that is well-lit, preferably with natural light, free from glare and no distractions (e.g. other children, pictures, toys, noise). Mass screenings are problematic due to the group size. Mass screenings drastically reduce the effectiveness of your screening program. Utilize the Evaluation Tool (Form A) to ensure you are evaluating the key questions annually.

Kindergarten Round Up

Kindergarten round-ups are a frequently used orientation program for pre-kindergarteners and their parents/ guardians. This event encourages families to see classrooms, meet teachers, and experience a kindergarten day. During this time schools can assess the child’s health through various screening tests.

In an effort to streamline the screening process, preschool screenings that occur after April 1 and follow the procedures for kindergarten screening requirements will fulfill the kindergarten screening requirements as the child’s kindergarten screening. The chart below illustrates the path screeners need to follow to fulfill this requirement.



Required Pre-Screening Procedure

Direct Observation

All children should be observed for signs of eye problems. The signs and symptoms of appearance include, but are not limited to the following chart below. Referrals should be made when any of the following signs are noted by an observer:

- Note any of the following eye conditions
 - Ocular asymmetry, including eye size.
 - Abnormal color of iris, shape of pupils, etc.
 - Red, swollen eyelids.
 - Drooping eyelid(s).
 - Growth on lid or eye.
 - Drainage or discharge from the eyes.
 - Consistently crusty eyelashes.
 - Unequal pupil size;
 - Cloudiness or haziness of cornea.
 - Red eye or eyes.
 - Misaligned eyes (ocular muscle imbalance).
 - Eyes in constant motion, i.e., nystagmus.
 - Consistently poorly fitting frames or scratched corrective lenses.

Form B is an optional Observation Checklist which can be utilized by teachers, parent/guardian or school nurse (page 95).

It is important to note that a rescreening is not necessary for a referral based on observation alone.

Referrals can be made on frequent behaviors observed by a teacher, parent/guardian or school nurse

- Note the following behaviors
 - Holding working material excessively close or far from the eyes.
 - Squinting.
 - Frequent rubbing or blinking of eyes.
 - Frowning when reading.
 - Thrusting head forward.
 - Constant head tilt or face turn/any unusual head position.
 - Covering an eye while reading.
 - Closing one eye from light sensitivity.

In addition to appearance and frequent behavior observed, referrals can be made based on complaints from the child. The following list of questions is appropriate in working with the older child or parent/guardian to obtain a history of complaints:

- Do you have or wear glasses?
- Do you have difficulty seeing in the distance (such as when looking across the street) or at a close distance (such as when reading a book)?
- Do you have blurred or double vision when reading or doing close work?
- Do you get frequent headaches when reading or doing close work?
- Do your eyes feel tired when reading or doing close work?
- Do you have blurred vision when going from distance work to near work or near work to distance work?
- Note the following complaints might come from the child, parent or guardian.
 - Eye pain;
 - Itching and/or burning sensation;
 - Double vision;
 - Blurred vision;
 - Frequent headaches when reading;
 - Persistent visual complaints after reading or any sustained near activity;
 - Light sensitivity; or
 - Spots floating across field of vision.

Record Results:

Vision Screening Record (Form F for Preschool and Form H for School-age)

Tips

- The School Observation Checklist may be distributed to the teachers prior to the screening. (Form B)
- This checklist may be printed in the school newsletter for parents prior to the screening.

Referral




- A child has any of the conditions listed in direct observation shall be referred immediately for a comprehensive eye exam by an optometrist or ophthalmologist.

Approved Occluders

Approved occluders for all ages include adhesive patches, 2-inch surgical tape, or occluder glasses with opaque or frosted lenses.

Not Approved Items

- Cups paper or plastic occluder
- Hands

Adhesive patches	Frosted Lenses	Two-Inch Surgical Tape
		

Approved occluders for children age 10 and older include the above and approved paddle occluders (e.g., lollipop pictured below) and the hand-held “Mardi Gras mask” which are designed to prevent peeking.

Adhesive patches	“Mardi Gras Mask”	Paddle Occluder	Frosted Lenses
			

Note: Paper fish-shaped occluders, tissues, cups (paper or plastic), and hands are not approved and should not be used because children can easily circumvent these types of occlusion which can result in missed detection of vision problems due to peeking.

Caution should be used when applying adhesive patches or surgical tape to a child’s face.

Preschool Vision Screening – Approved Equipment Monocular Distance Visual Acuity

1. LEA VIP Single, Crowded LEA Symbols at 5 feet;
2. Suresight Vision Screener;
3. Retinomax Vision Screener;
4. JAEB Vision Screener;
5. EyE Check Screener with LEA Symbols VA screening test system at 5 feet;
6. LEA Symbols Chart 10 feet (Phase out 2020-2021 School Year).



Preschool Vision Monocular Distance Visual Acuity Option 1: LEA VIP Single, Crowded LEA Symbols at 5 Feet Utilize Form C: 3 Year old form & Form D: 4-5 Year Old Form

Equipment

To conduct a Distance Visual Acuity screening using the VIP single, Crowded LEA Symbols at 5 feet you will need the following equipment:

1. A lap card with each of the four symbols surrounded by crowding bars
2. Baseline flipbook with four symbols for each eye
3. Two Crowded Single LEA Symbols Visual Screening Test disk cards
 - a. One card is for screening 3-year-olds, and the other for screening 4- and 5-year olds
 - b. Each card is two sided. One side is for the right eye and one side is for the left eye
 - c. The disk card contains eight symbols on each side
 - d. Each symbol is surrounded by black lines, called crowding bars which improve detection of lazy eye or amblyopia
 - e. Each time the disk is turned, a new symbol appears in the masking window
4. Approved Occluder(s)
5. VIP Illuminator/lamp stand — if lighting is not adequate
6. Five foot measuring cord

Preparation

- There should be little to no other activity in the room to distract the child. No other children should be waiting to be screened in the same area as the child being screened.
- The room should not be dark. If the screener cannot adequately observe the child being screened, the room is too dark.
- Typical classroom lighting with many overheated florescent bulbs may have too much glare.
- Arrange the child’s chair so that the cards placed on the lamp stand are 5 feet from the child’s eyes. The child’s eyes should be at the same height as the cards on the stand.

- Orient the child to the four symbols on the lap card by asking what the symbols look like. The child must be able to match or name all 4 symbols. The child must name the symbols consistently, but he/she does not need to use the actual symbol names (e.g. the apple may be called a heart or a tooth, or the square might be a window, etc.) The child can match by pointing or naming.
- If the child cannot match or name the symbols, mark “Unable to test.”

**Steps to Conducting — Monocular Distance Visual Acuity
— VIP Single, Crowded LEA Symbols at 5 Feet**

Step 1

Position the child 5 feet from where the cards will be presented. Make sure the child’s eyes are lined up with the 5 foot distance.

Step 2

To test the right eye, place the occluder glasses on the child so that the left eye is covered. Choose the proper baseline cards for the right eye and go through all four presentations.

Step 3

Pick up the appropriate disk card for the child’s age and begin testing with the symbols. After the child gives his/her response (verbal response or points to the corresponding symbol on the lap card), rotate the wheel clockwise to the next symbol.

Continue testing with each successive symbol until the child completes testing on all symbols. Be sure to move the disk in the same clockwise direction. If a child misses 2 or more of the first 4 symbols or 2 or more of the second 4 symbols on the disk for either the right OR the left eye. If a child misses 2 or more symbols during presentation of the baseline cards a referral is made.

Step 4

To test the left eye, cover the right eye with the occluding glasses. Choose the proper baseline card for the left eye and go through all four presentations. Repeat the testing procedure from Step 3 on the left eye.

Record Results:

Preschool Vision Screening Record (Form F).

Tips

- Select the correct occluder and place them on the child.
- If the child wears prescription glasses, the occluder should always be worn over his/her glasses.

Rescreen

At the discretion of the screener: at least one day following the non-pass screening, but in no case later than 4 to 6 weeks. If rescreen is not feasible, a referral should be made.

Referral Criteria

A referral is made if a child misses 2 or more of the first 4 symbols or 2 or more of the second 4 symbols on the disk for either the right OR the left eye. If a child misses 2 or more symbols during presentation of the baseline cards. Utilize Form C: 3 Year old form or Form D: 4-5 Year old.

**Preschool Vision Screening Monocular Distance Visual Acuity Test
Option 2: SureSight Vision Screener**

Equipment

1. SureSight Vision Screener

Preparation

- A charged unit can test child for about 3 hours of continuous use.
- To charge the unit, place firmly into the stand.
- Push any button to turn on the unit.
- Position the child so that the test can be conducted level with, and square to, child’s eyes.
- Choose the appropriate calibration using the child/adult button (child mode for 6 yr. and under). Hold button until you hear a double beep and see the desired icon on the LCD.
- Explain the test procedure to the child.
- Position yourself at eye-level and square with the face of the child.



Steps to Conducting a Vision Screening Using the SureSight

Step 1

Push the “GO” button on the unit and look through the viewer, positioning the crosshairs in the viewer at the pupil of the child’s right eye.

Step 2

Watch that the child is looking for the red light in the middle of the green lights.

Step 3

Position the unit at the correct distance from the child: When the unit is too far away, you will hear slow, low-pitched beeps; slowly move closer. At the correct distance (14”), you will hear a steady, low tone. When the unit is too close, you will hear quick, high-pitched beeps; slowly move further away.

Step 4

The crosshair will flash in sync with the tones. Look through the peephole and align the crosshair on the pupil of the child’s right eye. While the unit is acquiring data, you will hear a very high pitched chirping sound over the steady low tone.

Step 5

Acquiring data — If you are not acquiring data (steady tone without acquiring data chirps); Scan around the pupil in an outward-moving spiral until chirps begin, then hold this location. Ask the child if they can see the red light. When the test of the right eye is complete, you will hear the “tah-dah” sound. Testing resumes after 1 second, so you do not need to press any buttons for the left eye test.

Step 6

Without changing position, rotate the unit to the left eye and align the crosshair over the pupil. Repeat test on left eye.

Step 7

At the end of the test, you will hear the “tah-dah” sound again.

Note: If the unit has not gathered enough good readings from either eye, you will hear 5 tones when the test stops. You must re-test that eye. To stop a test at any time, hold any button until 5 tones sound.

Record Results

Preschool Vision Screening Record (Form F).

Tips

- Do not perform screening test near uncovered windows. Dimmed light can help those with small pupils; however, not enough light will make it difficult to screen those with dark irises.
- Make sure the unit is straight and level with the child. When screening the second eye, simply rotate the unit over (twist your upper body) because it is already at the proper angle and distance.
- Bring the child’s attention to the green/red lights and monitor fixation on those lights.
- Make sure the child’s eyelids are not occluding the pupil.
- ODH requires using the Vision in Preschoolers Study (VIP) criteria when using the SureSight Vision Screener. These criteria can be programmed into the software such that an asterisk will appear for any child who meets the failure criteria. The instrument should be set to read in minus cylinder in order to apply the referral criteria properly.
- Do not sterilize SureSight or any of its components. All windows on the SureSight can be cleaned with a soft cloth moistened with 70 percent Isopropyl Alcohol or any standard window cleaner. Keep front window clean to insure proper function.
- When the calibration symbol is shown, it indicates that it has been 18 months since the unit was last calibrated. It is recommended that you send the unit in for re-calibration. SureSight can only be used if it has been calibrated.



Rescreen

At the discretion of the screener: at least one day following the non-pass screening, but in no case later than 4 to 6 weeks. If rescreen is not feasible, a referral should be made.

Referral Criteria

An asterisk (*) next to a reading on the LCD screen. ODH requires using the Vision in Preschoolers Study (VIP) criteria when using the Suresight Vision Screener.

Referral Criteria for Suresight Vision Screening Test

Screener	Hyperopia	Myopia	Astigmatism	Anisometropia*
Eye Care Professional	≥4.00 D	≥1.00 D	≥1.50 D	≥3.00 D
Nurse Screener	≥4.00 D	≥1.00 D	≥1.75 D	≥2.75 D
Lay Screener	≥4.50 D	≥1.00 D	≥1.75 D	≥2.25 D

The SureSight should be set in minus-cylinder format for these referral criteria (i.e. there should be a minus sign in front of the cylinder or astigmatism reading).

Preschool Vision Screening Monocular Distance Visual Acuity Test

Option 3: Retinomax Vision

A Retinomax vision screening identifies refractive error, and amblyogenic risk factors in children. Testing takes about one minute to complete. Screening results, including full refraction data can be printed for comparison from year to year or as a reference should the child need to be referred to an eye care professional for a comprehensive exam.

Equipment

- 1. The Retinomax autorefractor. (Retionomax 2 or above).
- 2. Printer for the Retinomax (Optional).
- 3. Printer paper (Optional).
- 4. A model eye for calibrating the Retinomax.
- 5. Stapler (to attach record to screening form).
- 6. Antibacterial wipes.

Preparation

- At the beginning of each screening day, check that the Retinomax is reading properly. Place the model eye in the holder on the charger and use the Retinomax in “manual mode” to measure the model eye. Check to be sure that the reading matched the label on the model eye. If the reading are not within ± 0.25 of the number on the model eye, contact the manufacturer to determine if service is needed.
- Make sure the measurement window is clean.
- Turn on the unit. Adjust the viewfinder until the internal monitor display becomes clear.
- Place the Retinomax on the charger.
- Attach the printer to the charger and turn on the printer and the charger.
- Tell the child to stand very still, he/she will see a picture. The child should keep his/her eye open as long as possible.

Steps to Conducting the Retinomax Test

Steps 1

If the child is wearing glasses, remove them prior to testing.

Step 2

Have the child sit/stand with his/her back against the wall/chair. The tester should sit facing the child. Tell the child to stand very still, he/she will see a picture.

Step 3

Press the blue “Power” button to turn on the Retinomax. Extend the forehead rest. Look at the lights on the switch panel.



Step 4

Make sure that “Auto Mode” is lit up; Make sure that “Quick” is not lit up.

Step 5

Look in the viewfinder. The display should show “RO/LO” in the upper right-hand corner. This shows that the Retinomax has taken 0 measurements for the right and left eye. If you do not see this, turn the Retinomax off and on again.

Step 6

Place the forehead rest on the child’s forehead and hold the Retinomax in front of the child’s right eye. Tell the child to look in the center of the round hole in the front of the Retinomax and see if he/she can find the “picture...” It may help to put your thumb on the child’s forehead. Hold the child’s head in place with your other fingers. The working distance is about 2 inches.

Step 7

Position the Retinomax in front of the child’s eye using the vertical eye position target line and the horizontal eye position target line. Alignment is easier by looking through the viewfinder after lowering the forehead rest to where it comes in contact with the child.

Step 8

Press the green “Start” button on the handle once to begin taking measurements. Look through the viewfinder. You will see a set of brackets ([]). Center the brackets over the child’s pupil. See that the center dot is focused.

Step 9

Move the unit toward and away from the child until each dot image of the mire ring can be seen clearly. Adjust the distance so that the mire ring is as small and sharp as you can make it. Keep the headrest in contact with the child’s forehead or with your thumb on the child’s forehead.

Step 10

When the alignment process is complete, the measurement is automatically started. Every time a measurement is made, a beep sounds.

Step 11

Encourage the child to keep looking at the picture in the Retinomax. It may help to keep talking to the child about the picture.

Step 12

Once the display on the Retinomax indicates that it has taken 8 measurements of the right eye (R8/L0), remove the instrument from the child’s forehead and align the instrument with the left eye. Listen for the beep and/or look at the lights on top of the instrument to be sure the instrument has switched to the left eye. Perform the measurements of the left eye. When the display on the Retinomax indicates that it has taken 8 measurements of the left eye (R8/L8), remove the unit from the child’s forehead. Aim it at the printer and press the “Print” button to print the child’s results. You will also see the results in the display. Do not put the instrument back on the charger until you have printed or recorded the results as this will erase the readings.

Step 13

If the readings taken do not have a confidence value of 8 or greater, you must take the readings again. Dimming the lights may help in obtaining a reliable measurement. Only eyes with a confidence value of 7 or less should be measured again. Up to two repeat sets of readings may be performed (as needed) for each eye. Each reading should be printed or recorded.

Step 14

Do not tear the printout from the printer until the screening test is completed. The first reading with a confidence value of 8 or greater should be used. If a confidence reading of 8 or higher is not achieved after 3 readings, the reading with the highest confidence level should be used.

Step 15

Turn off the Retinomax to clear the measurements for the next child. Rest the Retinomax in the charger in between screening children.

Step 16

Cleanse the headrest with antibacterial wipes.

Record Results

Preschool Vision Screening Record (Form F).

Tips

- The Retinomax must be set in minus-cylinder format for these referral criteria (i.e. there should be a minus sign in front of the cylinder or astigmatism reading).
- Avoid having the child talk in order to minimize head movement.

Rescreen

At the discretion of the screener: at least one day following the non-pass screening, but in no case later than 4 to 6 weeks. If rescreen is not feasible, a referral should be made.

Referral

ODH requires using the Vision in Preschoolers Study (VIP) criteria when using the Retinomax Autorefractor Vision Screener.

Referral Criteria for Retinomax Autorefractor Screening Test

Screener	Hyperopia	Myopia	Astigmatism	Anisometropia*
Eye Care Professional	≥1.50 D	≥2.75 D	≥1.50 D	≥1.75 D
Nurse Screener	≥1.75 D	≥3.25 D	≥1.50 D	≥2.75 D
Lay Screener	≥1.50 D	≥3.00 D	≥1.75 D	≥2.00 D

**Preschool Vision Screening Monocular Distance Visual Acuity Test Option 4:
JAEB Vision Screener: JVAS**

JAEB Visual Acuity Screener

Equipment

1. A desktop or laptop PC running Windows XP SP2 or newer, with .NET Framework 2.5 or higher.
2. A monitor with resolution of at least 800 x 600 pixels.
3. Small millimeter ruler (for calibrating).
4. Tape measure (for measuring the screening test distance).
5. Piece of masking tape, or equivalent (for marking the screening test distance).
6. Approved Occluder(s).
7. HOTV Matching Card, HOTV (Form E) (print and laminate, if possible, for ease of use).

Preparation

- Go to <http://pedig.jaeb.org/JVAS.aspx> to download the JVAS Sip file.
- Install the Software -Installation
 1. Open the JVAS.zip and extract all files.
 2. Double click on the file named “JVAS.exe” to start the screening program.
 3. Calibrate the JVAS by clicking “Calibrate” and following the prompts.
 4. Use a piece of tape and mark a spot on the floor 5 feet (1.5 meters) from the computer screen.
 5. If the child cannot match or name the letter, mark “Unable to test.”

Steps to Conducting the Test Instructions

Step 1

Position the child’s heels on the tape, 5 feet from the computer screen. Measure 5-foot screening distance between computer and child’s heels. Ensure the height is at the child’s eye level.

Step 2

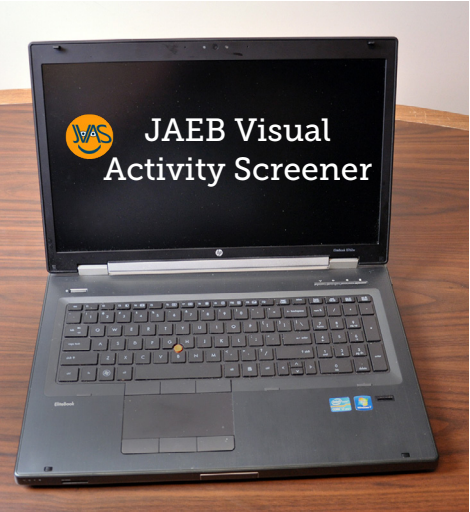
Cover his or her left eye with an approved occluder. Make sure the eye is completely occluded.

Step 3

For children aged 3-6 years, have the HOTV Matching Card by your side in case you need it.

Step 4

Select the child’s age on the bottom left corner.



Step 5

Click “Start Screening!”

Step 6

Verify the information is correct in the small window that pops up.

Step 7

Click “Start Screening” in the small window. Follow the prompts as instructed.

Step 8

Children will be required to identify the letters that are presented by JVAS. Children may verbalize the letter they see or for child aged 3 to less than 6 years of age, they may identify the letter by pointing to it on the HOTV Matching Card.

Step 9

First verify that the child is looking at the HOTV letter being presented. Then show the child the matching card and have him or her point to the letter seen on the screen. After he or she chooses a letter, turn over the matching card.

Step 10

At the bottom left corner of the screen, click “Correct” or “Incorrect” and then “Next Letter.” Repeat for each letter until finished.

Step 11

After screening has been completed for the right eye, you will be prompted to uncover the child’s left eye and cover his or her right eye.

Step 13

Follow the prompts for screening the child’s left eye.

Step 12

Record screening results. Remember that the program does not save screening results; be sure to record the results before leaving the results screen.

Record Results

Preschool Vision Screening Record (Form F).

Rescreen

At the discretion of the screener: at least one day following the non-pass screening, but in no case later than 4 to 6 weeks. If rescreen is not feasible, a referral should be made.

Referral Criteria

A referral is made on a child who fails the age appropriate visual acuity threshold automatically identified by the JVAS program.

Preschool Vision Screening Monocular Distance

Visual Acuity Test Option 5:

EyE Check Screener with LEA Symbols VA Screening

Test System at Five Feet

Equipment

To conduct a Distance Visual Acuity screening using the EyE Check Screener with LEA Symbols VA screening test system at 5 feet you will need the following equipment:

1. 20/40 FLIPBOOK for 4- and 5-year old children.
2. 20/50 FLIPBOOK for 3-year old children.
3. A lap card with each of the four symbols surrounded by crowding bars on it.
4. Measuring cord.
5. Approved Occluder(s).
6. Light Meter.
7. Lamp Stand – if lighting is not adequate.
8. Cleaning solution and wipes.



Preparation

Room Lighting

Securing adequate lighting is very important for vision screenings. A light meter that has good accuracy (rated at 4 percent or less) provides a read out in foot-candles or LUX, and is relatively inexpensive is needed to ensure that lighting is adequate for testing. There are three approved light meters for utilization of the EyE Check with LEA Symbols VA screening test system at 5 feet.

- EVA light Meter LX1330B
- Ruby Electronics DT-1301 Digital LCD Lux Foot-candle Luxmeter Light Meter
- Digital Light Meter 30000 Lux FTC with Max Min Hold

Place the EyE Check flipbook on a stand on a table or chair. Use the light meter to check the lighting on the cards. Place the light meter vertically on the edge of the stand with the white sensor facing where the child would be sitting. Look at the reading on the light meter. The number on the light meter should be above 297 lux (0.297 klux). If the light meter reads < 297 lux, add additional lighting on the flipbook (e.g. a lamp); recheck light meter reading on flipbook until lighting level is above 297.

Arrange the child’s chair so that child’s eyes are 5 feet from the flip book. The child’s eyes should be at the same height as the cards on the stand.

Orient the child to the four symbols on the lap card by asking what the symbols look like. The child must be able to identify or name all 4 symbols.

If the child cannot match or name the symbols, mark “Unable to test.”

Steps to Conducting - EyE Check Screener with LEA Symbols VA screening test system at 5 feet

Step 1

Use the 20/50 flipbook for child ages 3 years. Use the 20/40 vision screening flipbook with child aged 4 and 5 years.

Step 2

Begin by familiarizing child with the screening task. Hold the flipbook close to the child with child's eyes uncovered, and ask the child to name the symbols (pictures) on cards 1 through 4.

Step 3

Occlude child's left eye.

Step 4

Measure 5-foot screening distance between flipbook and the child's eyes using the attached cord. At 5-feet present flipbook at the child eye level.

Step 5

Beginning with flipbook card 5, ask the child to identify (by verbally naming or matching on the provided lap card) each symbol on flipbook cards 5 through 8. The four small individual cards included with the flipbook with one symbol on each card can be placed on floor in front of the child; child can match flipbook symbol by stepping on card.

Step 6

Circle correct responses, and mark an "X" through incorrect responses on the 4- and 5-Year-Old, resource form provided by vendor.

Step 7

Occlude the right eye with an approved occluder.

Step 8

Repeat screening and recording steps for the left eye, using flipbook cards 9 through 12.

Record Results

Preschool Vision Screening Record (Form F).

Tips

- Ensure child does not peek if using approved occluder.

Rescreen

At the discretion of the screener: at least one day following the non-pass screening, but in no case later than 4 to 6 weeks. If rescreen is not feasible, a referral should be made.

Referral Criteria

If a child misses 2 or more symbols on cards 5 to 8 OR cards 9 to 12 in the flipbook for either the right OR left eye then a referral is made.

Preschool Vision Screening Monocular Distance Visual Acuity Test
Option 6: Lea Symbols Chart at 10 Feet With Light Box
(Phase out 2020-2021 School Year)

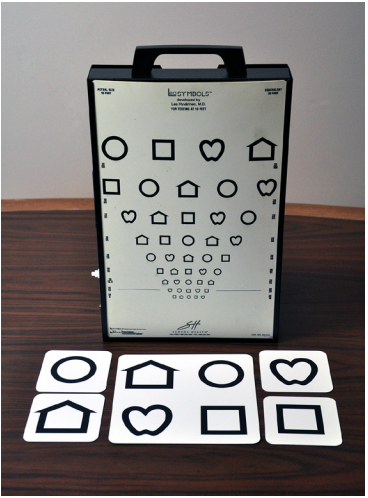
Equipment

You should have the following equipment to conduct a Distance Visual Acuity screening using the LEA Symbols chart:

1. LEA Symbols chart for use at 10 feet
2. Light Box that fits above chart
3. Approved Occluder(s)
4. Measuring tape

Preparation

- There should be little to no other activity in the room to distract the child. No other child should be waiting to be screened in the same area as the child being screened.
- The room should not be dark. If the screener cannot adequately observe the child being screened, the room is too dark.
- Typical classroom lighting with many overhead fluorescent bulbs may have too much glare.
- Measure the screening distance to the acuity chart, and place masking tape at both ends of the measurement. Be certain that the chart is being used at the correct distance.
- Turn on the lighted cabinet or light stand.
- Position the lighted cabinet or light stand to ensure that the eye chart is at the child's eye level (seated or standing).
- If the child is seated, the back of the chair should be placed on the line, and the back of the child's head should line up with the tape. If the child remains standing, the back of his/her heels should be placed on the tape.



Steps to Conducting the Test

Step 1

Have the child seated at the appropriate distance from where the eye chart will be presented. If the child wears glasses, test with glasses on. If the child says that sight is better with glasses off, test both ways.

Step 2

Familiarize the child with the eye chart by practicing the names of each symbol. This can be done using a lap card close up or at the screening test distance. Do NOT use lines that will be used to determine pass versus refer.

Step 3

Briefly point below the symbol you want the child to identify. Initially the child identifies one symbol from each line, starting with the 20/100 line. Encourage the child to guess if he/she hesitates. Always present the entire chart to the child. Do not isolate lines, letters or symbols. This process continues with the first symbol on each line through 20/30 or 20/32 (depending on the chart being used) or until the child gives an incorrect response.

Step 4

Next, ask the child to identify each symbol on the 20/30 or 20/32 line.

- If the child was able to identify 3 out of 5 symbols correctly, the child passed.
- If the child has made 3 or more errors on that line, test successively larger lines until the child can correctly identify the symbols with none or only 2 missed.

Step 5

Occlude the right eye and test the left eye. Repeat Step 3 and Step 4.

Record Results

Preschool Vision Screening Record (Form F).

Rescreen

At the discretion of the screener: at least one day following the non-pass screening, but in no case later than 4 to 6 weeks. If rescreen is not feasible, a referral should be made.

Referral Criteria

A referral is made for children whose visual acuity is 20/40 or worse in either eye. To pass the LEA Symbols Chart, a child must be able to identify 3 out of 5 symbols on the passing line, which is 20/32, with each eye separately. If a child has a two line difference between his/her eyes (e.g., reads 20/32 and 20/50 in the other eye). The difference may be an indication of amblyopia and should be referred.

Preschool Stereopsis Test

Stereopsis screenings help to determine if a child is using both eyes together, which may identify a child who has or is at risk for amblyopia. The preferred method for assessment of stereopsis is the Preschool Assessment of Stereopsis with a Smile (PASS 2).

Stereopsis testing is required for all preschool screening, test options with the exception of the VIP single crowded LEA Symbols® VA screening test system at 5 feet.

**Preschool Vision Screening Stereopsis Option 1:
PASS Test 2 - Preschool Assessment of Stereopsis With a Smile**

Children Age 3-5

Equipment

1. Card A —Demonstration card.
2. Card B —screening a 3- to 5-year-old child.
3. Card C —2nd screening card for screening 5-year-old child only.
4. Blank card.
5. Pair of small pediatric polarized glasses.
6. Measuring cord.

Preparation

- Choose a well-lit, glare free area.
- Have the child sit or stand to take the test.
- Set up so that the cards will be 16 inches from the child’s eyes (check distance with cord provided).
- Make sure the cards are at the child’s eye level.
- Be sure there is no glare on the surface of the cards.
- If a child wears glasses, test him/her with glasses on. (Place the polarized glasses over the child’s glasses).
- To preserve the polarized glasses, avoid touching them. To clean the lenses, use no liquid. A regular soft dry cloth is recommended, but do clean the stems and frames in between uses.



Steps to Conduct Preschool Assessment of Stereopsis with a Smile (PASS 2)

The back of each card is labeled. Begin with card A (demonstration card). This card has a two dimensional smile face, and is used for training purposes.

Step 1

Put the polarized glasses on the child. If a child wears glasses, place the polarized glasses over the glasses. Ask the child to point to or identify the smile face on card A. Tell the child the figure is “popping” off the card and ask the child to point to it. This allows you to be certain the child can identify the figure.

Step 2

Next allow the child to look at card B and the blank card side by side at 16 inches, in front of the child at a 10 degree angle (top of card tilted back towards the screener.) Tell the child to point to the card with the smile face. If the child cannot successfully identify card B, stop testing.

Step 3

Shuffle the cards behind your back to change the position of the smile face. Present the cards to the child side by side. Repeat a maximum of five times.

Step 4

The child is successful if the child is able to identify the card with the smile face 4 of 4 or 4 of 5 presentations. The child is unsuccessful if he/she answers incorrectly one or more times.

Step 5

For five year old children only: If a five year old successfully identifies 2 or more presentations of card B, replace card B with card C and repeat the same procedure again with card C and the blank card.

Step 6

The child is successful if the child is able to identify the card with the smile face 4 of 4 or 4 of 5 presentations. The child is unsuccessful if he/she answers incorrectly one or more times.

Record Results

Preschool Vision Screening Record (Form F).

Tips

- Always watch the child’s eyes to determine if the child is looking at both cards before identifying the card with the smile face. It is a good idea to remind the child each time to look at both of the cards before pointing.
- Be sure to separate the cards sufficiently to be able to determine which card the child has selected as having the smile face.
- Ensure that the arrow on the back of each card is pointing up. Always hold the blank card at exactly the same distance from the child as the other card.
- Avoid creating patterns of presentation (i.e. R,L,R,L or R,R,L,L).
- It may take several seconds for the child to see the Smile Face. Suggest that the Smile Face is hiding to encourage the child to continue looking for it.
- Store the stereo test in a cool dry place when not in use. High heat and humidity may cause the test to fade.

Rescreen

At the discretion of the screener: at least one day following the non-pass screening, but in no case later than 4 to 6 weeks. If rescreen is not feasible, a referral should be made.

Referral Criteria

If a three or four year old child does not correctly identify Card B on 4 out of 4 or 4 out of 5 presentations.

If a five year old child does not correctly identify 2 out of 2 cards B or 4 out of 4 or 4 out of 5 presentations on Card C.

Preschool Vision Screening Stereopsis Option 2:
Random Dot E (RDE) Phase Out 2020-2021 School Year

Equipment

- 1. Random Dot E (RDE) demonstration card.
- 2. One blank test card.
- 3. One stereo “E” test card.
- 4. Pair of polarized glasses.

Preparation

- Have the child sit or stand to take the test in a well-lit, glare free area.
- Measure the 5 foot screening test distance and mark it using masking tape.
- Make sure the cards are at the child’s eye level.
- Ensure it is 5 feet from the child’s eyes to the cards.



Steps to Conduct RDE Stereopsis Screening

Step 1

Put the polarized glasses on the child. If a child wears glasses, place the polarized glasses over the glasses.

Step 2

Show the child the raised E figure on the demonstration card. Tell the child the E is “popping” off the card and ask the child to point to it. This allows you to be certain the child can identify the E figure. Present the demonstration E card with the blank card and ask the child to point to the card with the “E”.

Step 3

Present the test “E” card with the blank card. Allow the child to look at both test cards at twenty (20) inches. Tell the child to point to the card with the “E.” Shuffle cards behind your back and again ask the child to point to the card with the “E”. Repeat 2 to 3 more times.

Step 4

When the child understands the task, move back to the screening test distance of 5 feet.

Step 5

Present the test “E” card with the blank card. Tell the child to point to the card with the “E.” Shuffle cards behind your back and again ask the child to point to the card with the “E”. Repeat 2 to 3 more times. Shuffle the cards behind your back after each presentation. The child is successful (passes) if he/she is able to identify the card with the “E” on 4 of 4 presentations.

Record Results

Preschool Vision Screening Record (Form F).

Tips

- If the child wears glasses, test them with his/her glasses on.

Rescreen

At the discretion of the screener: at least one day following the non-pass screening, but in no case later than 4 to 6 weeks. If rescreen is not feasible, a referral should be made.

Referral Criteria

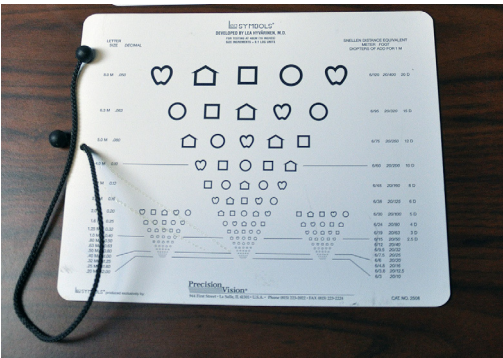
A child must correctly identify the E correctly four out of four times at a screening test distance of 5 feet.

Preschool Vision Screening Optional Screening Test:
Near Visual Acuity

Near Visual Acuity is not a mandatory test. Screening for near acuity may be appropriate when there are concerns regarding a child’s ability to see close up or a child exhibits signs of eyestrain or headaches after near work, loses his place when reading or complains of blurriness when reading or after any extended near activity.

Equipment:

- 1. Near point acuity card (HOTV, Letters or LEA Symbols®) with pre-measured cord with an attached matching card so the child can identify each letter by naming or pointing



Preparation

- Make sure the room in which you are screening has no distractions, is quiet and well-lit. As the card or chart is presented, make sure it is free from glare.

Steps to Conduct Near Visual Acuity:

Step 1

Position the child and use the attached cord to determine the distance to the child’s face. Do not allow the child to lean the head or torso forward. Pre-measured cords when pulled and kept taut, maintain an optimal test distance (16 inches per most manufacturer’s instructions).

Step 2

Test the child with both eyes. If the child wears glasses, test them with his/her glasses on.

Step 3

Ask the child to read one symbol/letter on each line as directed starting at the top line. Do not cover or mask symbols in an attempt to enhance performance. If the first symbol is correctly identified, the next smallest size is shown. This process continues with the first symbol on each line through 20/20 or until the child gives an incorrect response.

Step 4

Next, ask the child to name all 4 symbols/letter on the line above the one with the first missed the symbol (i.e., last line with correct symbol identification).

- If the child identifies either 3 of 3 or 3 of 4 correct, continue to test successively smaller shapes until 2 on a line are missed.
- If the child was unable to correctly identify at least 3 of 4 correct on that line, test successively larger lines until 3 of 3 or 3 of 4 on a line are correct.

The near visual acuity is the smallest line for which at least 3 of 3 or 3 of 4 symbols/letters are correctly identified on the 20/32 line.

Record Results

Preschool Vision Screening Record (Form F).

Tips

- If the child wears glasses test with his/her glasses on.
- Watch to be sure the child is not peeking, tilting the head or squinting.





Rescreen

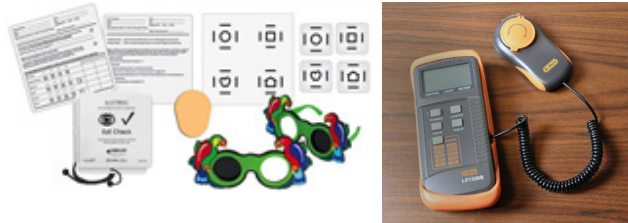
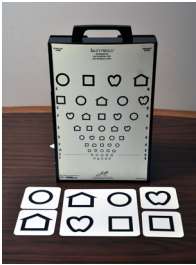


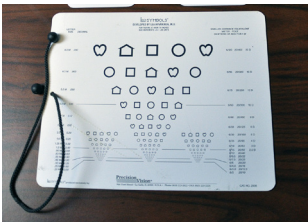
At the discretion of the screener: at least one day following the non-pass screening, but in no case later than 4 to 6 weeks. If rescreen is not feasible, a referral should be made.

Referral Criteria

A referral is made on a child whose visual acuity is 20/40 or worse with both eyes. To pass the letters or LEA symbols® chart with a 16” cord, a child must be able to identify 3 out of 3 or 3 out of 4 symbols on the passing line, which is 20/32, with both eyes together.

Preschool Vision Guidelines Summary of Requirements

Pre-Test	Referral Criteria	
Observation	Refer for any appearance or behavior concerns or complaints.	Preschool
Image and Visual Acuity Test	Referral Criteria	
 VIP single, crowded LEA Symbols® VA screening test system at 5 feet	A referral is made if a child misses 2 or more of the first 4 symbols or 2 or more of the second 4 symbols on the disk for either the right OR the left eye. If a child misses 2 or more symbols during presentation of the baseline cards.	Preschool
 SureSight Vision Screener	A referral is made if there is an asterisk (*) next to a reading on the LCD screen. ODH requires using the Vision in Preschoolers Study (VIP) criteria when using the SureSight Vision Screener.	Preschool
 Retinamax Auto refractor (Retinamax 2 or above)	ODH requires using the Vision in Preschoolers Study (VIP) criteria when using the Retinamax Vision Screener. See page 24.	Preschool
 JAEB Vision Screener: JVAS	A referral is made on a child who fails the age appropriate visual acuity threshold automatically identified by the JVAS program.	Preschool

 EyE Check Screener with LEA Symbols VA screening test system at 5 feet	If a child misses 2 or more symbols on cards 5 to 8 OR cards 9 to 12 in the flipbook for either the right OR left eye then a referral is made.	Preschool
 LEA Symbols Chart at 10 Feet	A referral is made for children whose visual acuity is 20/40 or worse in either eye. To pass the LEA Symbols Chart, a child must be able to identify 3 out of 5 symbols on the passing line, which is 20/32, with each eye separately. If a child has a two line difference between his/her eyes (e.g., reads 20/32 and 20/50 in the other eye). (Phase out 2020-2021 School Year).	Preschool
 Preschool Assessment of Stereopsis with a Smile (PASS 2)	A referral is made if a three or four year old child does not correctly identify Card B on 4 out of 4 or 4 out of 5 presentations. A referral is made if a five year old child does not correctly identify 2 out of 2 cards B or 4 out of 4 out of 5 presentations on Card C.	Preschool
 Random Dot E (RDE)	A child must correctly identify the E correctly four out of four times at a screening test distance of 5 feet. (Phase out 2020-2021 School Year).	Preschool
 Near Visual Acuity Optional Screening	A referral is made on a child whose visual acuity is 20/40 or worse with both eyes. To pass the LEA symbols® chart with a 16" cord, a child must be able to identify 3 out of 3 or 3 out of 4 symbols on the passing line, which is 20/32, with both eyes together.	Preschool

Note: If the child has a two line difference between his/her eyes (e.g., reads 20/32 and 20/50 in the other eye). The difference may be an indication of Amblyopia and a referral should be made.

School-Age Vision Screening –
Approved Equipment Monocular Distance
Visual Acuity Test

Kindergarten and First Grade

Option 1 - LEA VIP Single, Crowded LEA Symbols at 5 Feet

Option 2 – LEA Symbols 10 Feet Chart;

Option 3 - Suresight Vision Screener;

Option 4 - Retinomax Autorefractor;

Kindergarten, First Grade Through Eleventh Grade

Option 5 - JAEB Vision Screener: JVAS

Option 6 - SLOAN chart at 10 feet;

First Grade Through Eleventh Grade

Option 7 - Titmus Vision Screening Unit (Phase Out 2020-2021 School Year).

Option 8 - Keystone Vision Screening Unit (Phase Out 2020-2021 School Year).

School-Age Vision Screening

Option 1 - LEA VIP Single, Crowded LEA Symbols at 5 Feet.

Utilize Form D: 4 - 5 Year Old Form

(Kindergarten and First Grade)

This unit can be utilized for children who have language delays, those uncomfortable with letters and when English is a second language for children.

Equipment

To conduct a Distance Visual Acuity screening using the VIP single, crowded LEA Symbols VA screening test system at 5 feet you will need the following equipment:

1. A lap card with each of the four symbols surrounded by crowding bars
2. Baseline flipbook with four symbols for each eye
3. Two Crowded Single LEA Symbols Visual Screening Test disk cards
 - a. Utilize the 4- and 5-year olds screening disk
 - b. Each card is two sided. One side is for the right eye and one side is for the left eye
 - c. The disk card contains eight symbols on each side
 - d. Each symbol is surrounded by black lines, called crowding bars which improve detection of lazy eye or amblyopia
 - e. Each time the disk is turned, a new symbol appears in the window.
4. Approved occluder(s)
5. VIP Illuminator/lamp stand - if lighting is not adequate
6. 5' Measuring Cord



Preparation

- There should be little to no other activity in the room to distract the child. No other children should be waiting to be screened in the same area as the child being screened.
- The room should not be dark. If the screener cannot adequately observe the child being screened, the room is too dark.
- Typical classroom lighting with many overhead florescent bulbs may have too much glare.
- Arrange the child's chair so that the cards placed on the lamp stand are 5 feet from the child's eyes. The child's eyes should be at the same height as the cards on the stand.
- Orient the child to the four symbols on the lap card by asking what the symbols look like. The child must be able to match or name all 4 symbols. The child must name the symbols consistently, but he/she does not need to use the actual symbol names (e.g. the apple may be called a heart or a tooth, or the square might be a window, etc.) The child can match by pointing or naming.
- If the child cannot match or name the symbols, mark "Unable to test."

Steps to Conducting- Monocular Distance Visual Acuity-VIP Single,
Crowded LEA Symbols

Step 1

Position the child 5 feet from where the cards will be presented. Make sure the child's eyes are lined up with the 5 foot distance.

Step 2

To test the right eye, place the occluder glasses on the child so that the left eye is covered. Choose the proper baseline cards for the right eye and go through all four presentations.

Step 3

Pick up the appropriate disk card for the child's age and begin testing with the symbols. After the child gives his/her response (verbal response or points to the corresponding symbol on the lap card), rotate the wheel clockwise to the next symbol.

Continue testing with each successive symbol until the child completes testing on all symbols. Be sure to move the disk in the same clockwise direction. If a child misses 2 or more symbols during presentation of the baseline cards or if a child misses 2 or more symbols on the disk during the test for either the right or left eye then a referral is made.

Step 4

To test the left eye, cover the right eye with the occluding glasses. Chose the proper baseline card for the left eye and go through all four presentations. Repeat the testing procedure from Step 3 on the left eye.

Record Results

School-Age Vision Screening Record (Form H).

Tips

- Select the correct approved occluder and place them on the child.
- If the child wears prescription glasses, the occluder glasses should always be worn over his/her glasses.

Rescreen

At the discretion of the screener: at least one day following the non-pass screening, but in no case later than 4 to 6 weeks. If rescreen is not feasible, a referral should be made.

Referral Criteria

A referral is made if a child misses 2 or more of the first 4 symbols or 2 or more of the second 4 symbols on the disk for either the right OR the left eye. If a child misses 2 or more symbols during presentation of the baseline cards. Utilize Form D for kindergarteners and first graders.

**School-Age Vision Screening Option 2:
LEA Symbols Chart at 10 Feet: (Kindergarten and First Grade):**

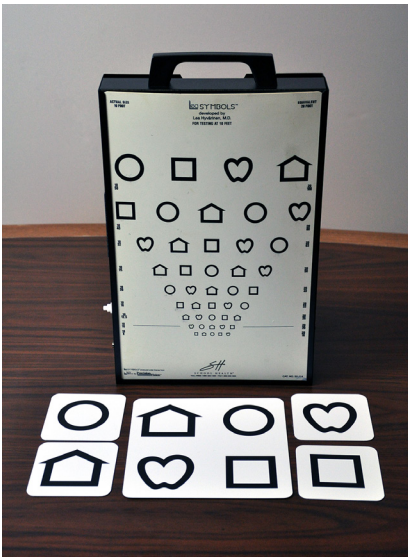
Equipment

You should have the following equipment to conduct a Distance Visual Acuity screening using the LEA Symbols chart:

1. LEA Symbols Chart for use at 10 feet.
2. Light Box that fits above chart.
3. Approved occluder(s).
4. Measuring tape.

Preparation

- There should be little to no other activity in the room to distract the child. No other children should be waiting to be screened in the same area as the child being screened.
- The room should not be dark. If the screener cannot adequately observe the child being screened, the room is too dark.
- Typical classroom lighting with many overhead fluorescent bulbs may have too much glare.
- Measure the screening distance to the acuity chart, and place masking tape at both ends of the measurement. Be certain that the chart is being used at the correct distance.
- Turn on the lighted cabinet or light stand.
- Position the lighted cabinet or light stand to ensure that the eye chart is at the child’s eye level (seated or standing).
- If the child is seated, the back of the chair should be placed on the line, and the back of the child’s head should line up with the tape. If the child remains standing, the back of his/her heels should be placed on the tape.



Steps to Conducting the Test

Step 1

Have the child seated at the appropriate distance from where the eye chart will be presented. If the child wears glasses, test with glasses on. If the child says that sight is better with glasses off, test both ways.

Step 2

Familiarize the child with the eye chart by practicing the names of each symbol. This can be done using a lap card close up or at the screening test distance. Do NOT use lines that will be used to determine pass versus refer.

Step 3

Briefly point below the symbol you want the child to identify. Initially the child identifies one symbol from each line, starting with the 20/100 line. Encourage the child to guess if he/she hesitates. Always present the entire chart to the child. Do not isolate lines, letters or symbols. This process continues with first symbol on each line through 20/30 or 20/32 (depending on the chart being used) or until the child gives an incorrect response.

Step 4

Next, ask the child to identify each symbol on the 20/30 or 20/32 line.

- If the child was able to identify 3 out of 5 symbols correctly, the child passed.
- If the child has made 3 or more errors on that line, test successively larger lines until the child can correctly identify the symbols with none or only 2 missed.

Step 5

Occlude the right eye and test the left eye. Repeat Step 3 and Step 4.

Record Results

School-Age Vision Screening Record (Form H).

Rescreen

At the discretion of the screener: at least one day following the non-pass screening, but in no case later than 4 to 6 weeks. If rescreen is not feasible, a referral should be made.

Referral Criteria

A referral is made for child whose visual acuity is 20/40 or worse in either eye. To pass the LEA Symbols Chart, a child must be able to identify 3 out of 5 symbols on the passing line, which is 20/32, with each eye separately. If a child has a two line difference between his/her eyes (e.g., reads 20/32 and 20/50 in the other eye). The difference may be an indication of amblyopia and should be referred.

School-Age Vision Screening Option 3: SureSight Vision Screener (Kindergarten and First Grade Only)

Equipment

1. SureSight Vision Screener

Preparation

- A charged unit can test children for about 3 hours of continuous use.
- To charge the unit, place firmly into the stand.
- Push any button to turn on the unit.
- Position the child so that the test can be conducted level with, and square to, child's eyes.
- Choose the appropriate calibration using the child/adult button (child mode for 6 year and under). Hold button until you hear a double beep and see the desired icon on the LCD.
- Explain the test procedure to the child.
- Position yourself at eye-level and square with the face of the child.



Steps to Conducting the SureSight Test

Step 1

Push the "GO" button on the unit and look through the viewer, positioning the crosshairs in the viewer at the pupil of the child's right eye.

Step 2

Watch that the child is looking for the red light in the middle of the green lights.

Step 3

Position the unit at the correct distance from the child: (When the unit is too far away, you will hear slow, low-pitched beeps; slowly move closer. At the correct distance (14"), you will hear a steady, low tone. When the unit is too close, you will hear quick, high-pitched beeps; slowly move further away.)

Step 4

The crosshair will flash in sync with the tones. (Look through the peephole and align the crosshair on the pupil of the child's right eye. While the unit is acquiring data, you will hear a very high pitched chirping sound over the steady low tone.

Step 5

Acquiring data —If you are not acquiring data (steady tone without acquiring data chirps); Scan around the pupil in an outward-moving spiral until chirps begin, then hold this location. Ask the child if they can see the red light. When the test of the right eye is complete, you will hear the “tah-dah” sound. (Testing resumes after 1 second, so you do not need to press any buttons for the left eye test.)

Step 6

Without changing position, rotate the unit to the left eye and align the crosshair over the pupil. Repeat test.

Step 7

At the end of the test, you will hear the “tah-dah” sound again.

Note: If the unit has not gathered enough good readings from either eye, you will hear 5 tones when the test stops. You must re-test that eye. To stop a test at any time, hold any button until 5 tones sound.

Record Results

School-Age Vision Screening Record (Form H).

Tips

- Do not perform screening test near uncovered windows. Dimmed light can help those with small pupils, however, not enough light will make it difficult to screen those with dark irises.
- Make sure the unit is straight and level with the child. When screening the second eye, simply rotate the unit over (twist your upper body) because it is already at the proper angle and distance.
- Bring the child’s attention to the green/red lights and monitor fixation on those lights.
- Make sure the child’s eyelids are not occluding the pupil.
- ODH requires using the Vision in Preschoolers Study (VIP) criteria when using the SureSight Vision Screener. These criteria can be programmed into the software such that an asterisk will appear for any children who meets the failure criteria. The instrument should be set to read in minus cylinder in order to apply the referral criteria properly.
- Do not sterilize SureSight or any of its components. All windows on the SureSight can be cleaned with a soft cloth moistened with 70% Isopropyl Alcohol or any standard window cleaner. Keep front window clean to insure proper function.
- When the calibration symbol is shown, it indicates that it has been 18 months since the unit was last calibrated. It is recommended that you send the unit in for re-calibration. SureSight can only be used if it has been calibrated.

Rescreen

At the discretion of the screener: at least one day following the non-pass screening, but in no case later than 4 to 6 weeks. If rescreen is not feasible, a referral should be made.

Referral Criteria

An asterisk (*) next to a reading on the LCD screen. ODH requires using the Vision in Preschoolers Study (VIP) criteria when using the Suresight Vision Screener.

Referral Criteria for SureSight Vision Screening Test

Screener	Hyperopia	Myopia	Astigmatism	Anisometropia*
Eye Care Professional	≥4.00 D	≥1.00 D	≥1.50 D	≥3.00 D
Nurse Screener	≥4.00 D	≥1.00 D	≥1.75 D	≥2.75 D
Lay Screener	≥4.50 D	≥1.00 D	≥1.75 D	≥2.25 D

The SureSight should be set in minus-cylinder format for these referral criteria (i.e. there should be a minus sign in front of the cylinder or astigmatism reading).

School-Age Vision Screening Option 4: Retinomax Autorefractor: (Kindergarten and First Grade Only)

A Retinomax vision screening identifies refractive error, and amblyogenic risk factors in children. Testing takes about one minute to complete. Screening results, including full refraction data can be printed for comparison from year to year or as a reference should the child need to be referred to an eye care professional for a comprehensive exam.

Equipment

1. The Retinomax autorefractor.
2. Printer for the Retinomax.
3. Printer paper.
4. A model eye for calibrating the Retinomax.
5. Stapler (to attach reading to screening from).
6. Antibacterial wipes.

Preparation

- At the beginning of each screening day, check that the Retinomax is reading properly. Place the model eye in the holder on the charger and use the Retinomax in “manual mode” to measure the model eye. Check to be sure that the reading matched the label on the model eye. If the reading are not within ± 0.25 of the number on the model eye, contact the manufacturer to determine if service is needed.
 - Make sure the measurement window is clean.
 - Turn on the unit. Adjust the viewfinder until the internal monitor display becomes clear.
 - Place the Retinomax on the charger.
 - Attach the printer to the charger and turn on the printer and the charger.
 - Tell the child to stand very still, he/she will see a picture. The child should keep his/her eye open as long as possible.

Steps to Conducting the Retinomax Test

Steps 1

If the child is wearing glasses, remove them prior to testing.

Step 2

Have the child sit/stand with his/her back against the wall/chair. The tester should sit facing the child. Tell the child to stand very still, he/she will see a picture.

Step 3

Press the blue “Power” button to turn on the Retinomax. Extend the forehead rest. Look at the lights on the switch panel.



Step 4

Make sure that “Auto Mode” is lit up; Make sure that “Quick” is **not** lit up.

Step 5

Look in the viewfinder. The display should show “RO/LO” in the upper right-hand corner. This shows that the Retinomax has taken 0 measurements for the right and left eye. If you do not see this, turn the Retinomax off and on again.

Step 6

Place the forehead rest on the child’s forehead and hold the Retinomax in front of the child’s right eye. Tell the child to look in the center of the round hole in the front of the Retinomax and see if he/she can find the “picture” It may help to put your thumb on the child’s forehead. Hold the child’s head in place with your other fingers. The working distance is about 2 inches.

Step 7

Position the Retinomax in front of the child’s eye using the vertical eye position target line and the horizontal eye position target line. Alignment is easier by looking through the viewfinder after lowering the forehead rest to where it comes in contact with the child.

Step 8

Press the green “Start” button on the handle once to begin taking measurements. Look through the viewfinder. You will see a set of brackets ([]). Center the brackets over the child’s pupil. See that the center dot is focused.

Step 9

Move the unit toward and away from the child until each dot image of the mire ring can be seen clearly. Adjust the distance so that the mire ring is as small and sharp as you can make it. Keep the headrest in contact with the child’s forehead or with your thumb on the child’s forehead.

Step 10

When the alignment process is complete, the measurement is automatically started. Every time a measurement is made, a beep sounds.

Step 11

Encourage the child to keep looking at the picture in the Retinomax. It may help to keep talking to the child about the picture.

Step 12

Once the display on the Retinomax indicates that it has taken 8 measurements of the right eye (R8/L0), remove the instrument from the child’s forehead and align the instrument with the left eye. Listen for the beep and/or look at the lights on top of the instrument to be sure the instrument has switched to the left eye. Perform the measurements of the left eye. When the display on the Retinomax indicates that it has taken 8 measurements of the left eye (R8/L8), remove the unit from the child’s forehead. Aim it at the printer and press the “Print” button to print the child’s results. You will also see the results in the display. Do not put the instrument back on the charger until you have printed or recorded the results as this will erase the readings.

Step 13

If the readings taken do not have a confidence value of 8 or greater, you must take the readings again. Dimming the lights may help in obtaining a reliable measurement. Only eyes with a confidence value of 7 or less should be measured again. Up to two repeat sets of readings may be performed (as needed) for each eye. Each reading should be printed or recorded.

Step 14

Do not tear the printout from the printer until the screening test is completed. The first reading with a confidence value of 8 or greater should be used. If a confidence reading of 8 or higher is not achieved after 3 readings, the reading with the highest confidence level should be used.

Step 15

Turn off the Retinomax to clear the measurements for the next child. Rest the Retinomax in the charger in between screening children.

Step 16

Cleanse the headrest with antibacterial wipes.

Record Results

School-Age Vision Screening Record (Form F).

Tips

- The Retinomax must be set in minus-cylinder format for these referral criteria (i.e. there should be a minus sign in front of the cylinder or astigmatism reading).
- Avoid having the child talk in order to minimize head movement.

Rescreen

At the discretion of the screener: at least one day following the non-pass screening, but in no case later than 4 to 6 weeks. If rescreen is not feasible, a referral should be made.

Referral

ODH requires using the Vision in Preschoolers Study (VIP) criteria when using the Retinomax Autorefractor Vision Screener.

Referral Criteria for Retinomax Autorefractor Screening Test

Screener	Hyperopia	Myopia	Astigmatism	Anisometropia*
Eye Care Professional	≥1.50 D	≥2.75 D	≥1.50 D	≥1.75 D
Nurse Screener	≥1.75 D	≥3.25 D	≥1.50 D	≥2.75 D
Lay Screener	≥1.50 D	≥3.00 D	≥1.75 D	≥2.00 D

**School-Age Vision Screening Option 5:
Monocular Distance Visual Acuity Test Option JAEB Vision Screener:
JVAS (Kindergarten Grade Through Eleventh Grade)**

JAEB Visual Acuity Screener

Equipment

1. A desktop or laptop PC running Windows XP SP2 or newer, with .NET Framework 2.5 or higher.
2. A monitor with resolution of at least 800 x 600 pixels.
3. Small millimeter ruler (for calibrating).
4. Tape measure (for measuring the screening test distance).
5. Piece of masking tape, or equivalent (for marking the screening test distance).
6. Approved occluder(s).
7. HOTV Matching Card (Form E), (print and laminate, if possible, for ease of use).



Preparation

- Go to <http://pedig.jaeb.org/JVAS.aspx> to download the JVAS Zip file.
- Install the Software -Installation.
- Open the JVAS.zip and extract all files.
- Double click on the file named “JVAS.exe” to start the screening program.
- Calibrate the JVAS by clicking “Calibrate” and following the prompts.
- Use a piece of tape and mark a spot on the floor 5 feet (1.5 meters) from the screen.

Steps to Conducting the Test

Step 1

Position the child on the tape, 5 feet from the computer screen.

Step 2

Cover his or her left eye with an approved occluder. Make sure the eye is completely occluded.

Step 3

For children aged 3-6 years, have the HOTV Matching Card by your side in case you need it.

Step 4

Select the child’s age on the bottom left corner.

Step 5

Click “Start Screening!”

Step 6
Verify the information is correct in the small window that pops up.

Step 7
Click “Start Screening” in the small window.

Step 8
Follow the prompts as instructed.

Step 9
Child will be required to identify the letters that are presented by JVAS. They may verbalize the letter he/she sees or for child aged 3 to less than 7 years of age, they may identify the letter by pointing to it on the HOTV Matching Card.

Steps On conducting the HOTV Matching Card: First verify that the child is looking at the HOTV letter being presented. Then show the child the matching card and have him or her point to the letter seen on the screen. After he or she chooses a letter, turn over the matching card.

Step 1
At the bottom left corner of the screen, click “Correct” or “Incorrect” and then “Next Letter.” Repeat for each letter until finished.

Step 2
After screening has been completed for the right eye, you will be prompted to uncover the child’s left eye and cover his or her right eye.

Step 3
Follow the prompts for screening the child’s left eye.

Step 4
Record screening results. Remember that the program does not save screening results; be sure to record the results before leaving the results screen.

Record Results
School-Age Vision Screening Record (see Form H).

Rescreen
At the discretion of the screener: at least one day following the non-pass screening, but in no case later than 4 to 6 weeks. If rescreen is not feasible, a referral should be made.

Referral Criteria
A referral is made on a child who fail the age appropriate visual acuity threshold identified by the JVAS program.

**School-Age Vision Screening Option 6 :
SLOAN Chart at 10 Feet: (Kindergarten Through Eleventh Grade)**

Equipment
You should have the following equipment to conduct a Distance Visual Acuity screening using the:

- Sloan chart:**
1. Sloan chart for use at 10 feet.
 2. Light Box that fits chart.
 3. Approved Occluder(s).
 4. Measuring tape.

- Preparation**
- There should be little to no other activity in the room to distract the child.
 - No other children should be waiting to be screened in the same area as the child being screened.
 - The room should not be dark. If the screener cannot adequately observe the child being screened, the room is too dark.
 - Typical classroom lighting with many overhead fluorescent bulbs may have too much glare.
 - Measure the screening distance to the acuity chart, and place masking tape at both ends of the measurement. Be certain that the chart is being used at the correct distance.
 - Turn on the lighted cabinet or light stand.
 - Position the lighted cabinet or light stand to ensure that the eye chart is at the child’s eye level (seated or standing).
 - If the child is seated, the back of the chair should be placed on the line, and the back of the child’s head should line up with the tape. If the child remains standing, the back of his/her heels should be placed on the tape.



Steps to Conducting the Test

Step 1
Have the child seated at the appropriate distance from where the eye chart will be presented. If the child wears glasses, test with glasses on. If the child says that sight is better with glasses off, test both ways.

Step 2
Familiarize the child with the eye chart by practicing the names of each letter.

Step 3

Briefly point below the letter you want the child to identify. Initially the child identifies one letter from each line, starting with the 20/100 line. Encourage the child to guess if he/she hesitates. Always present the entire chart to the child. Do not isolate lines, letters or symbols. This process continues with first letter on each line through 20/30 or 20/32 (depending on the chart being used) or until the child gives an incorrect response.

Step 4

Next, ask the child to name all the letters on the 20/30 or 20/32 lines the first missed the letter (i.e., last line with correct letter identification) or on the 20/30 or 20/32 line.

- If the child identifies the letters correctly with none or only 2 missed he/she passed.
- If the child has made 3 or more errors on that line, test successively larger lines until the child can correctly identify the letters with none or only 2 missed.

Step 5

Occlude the right eye and test the left eye. Repeat Step 3 and Step 4.

Record Results

School-Age Vision Screening Record (Form H).

Rescreen

At the discretion of the screener: at least one day following the non-pass screening, but in no case later than 4 to 6 weeks. If rescreen is not feasible, a referral should be made.

Referral Criteria

A referral is made on 20/40 or worse in either eye. To pass, the child identify the letters on the 20/32 line with each eye: 1-3 optotypes = no misses, 4-7 optotypes = one miss, and 8-11 optotypes = two misses.

**School-Age Vision Screening Optional 7:
Titmus (Phase Out 2020-2021 School Year)
First Through Eleventh Grade**

A Titmus Vision Screener can be used in place of Monocular Distance Visual Acuity testing. Follow the manufacturer’s instructions when operating the Titmus Vision Screener and for referral criteria.

Record Results

School-Age Vision Screening Record (Form H).

Rescreen

The child must be rescreened with appropriate approved chart prior to a referral within at least one day but in no case later than 4 to 6 weeks. A referral must be made if the child does not pass the rescreening with appropriate approved chart.

Referral

Follow the manufacturer’s instructions when operating the Titmus Vision for referral criteria.

If you have questions prior to purchasing vision screening equipment, contact ODH at (614) 644-0139.



Photo from <http://www.pandamed.co.uk/product/keystone-vs5-vision-screener/>

School-Age Vision Screening Optional 8:
Keystone (Phase out 2020-2021 School Year)
First Through Eleventh Grade

A Keystone Vision Screener can be used in place of Monocular Distance Visual Acuity testing. Follow the manufacturer’s instructions when operating the Keystone Vision Screener and for referral criteria.

Record Results

School-Age Vision Screening Record (see Form H).

Rescreen

The child must be rescreened with appropriate approved chart prior to a referral within at least one day but in no case later than 4 to 6 weeks. A referral must be made if the child does not pass the rescreening with appropriate approved chart.

Referral Criteria

Follow the manufacturer’s instructions when operating the Keystone Vision for referral criteria.

If you have questions prior to purchasing vision screening equipment, contact ODH at (614) 644-0139.



Photo from http://www.honeywellsafety.com/Products/Eye_and_Face_Protection/Titmus_V4_Vision_Screener.aspx?site=/europe

School-Age Vision Screening Stereopsis Approved Equipment Test
1-PASS 2
2-Random Dot E

Stereopsis screenings help to determine if a child is using both eyes together, and may identify a child who has or is at risk for amblyopia. The preferred method for School-Age Assessment of Stereopsis is a Smile (PASS 2).

Stereopsis testing is required for all kindergarten and first graders screening, test options with the exception of the VIP single crowded LEA Symbols® VA screening test system at 5 feet.

School-Age Vision Screening Stereopsis Option 1:
PASS Test 2 - Assessment of Stereopsis With a Smile
Children Age 5 and Over Kindergarten and First Unless New or Transfer.

Equipment

- 1. Card A — Demonstration card.
- 2. Card B — (1st screening card).
- 3. Card C — (2nd screening card).
- 4. Blank card.
- 5. Pair of small pediatric polarized glasses (appropriate size for children being screened).
- 6. Measuring Cord.



Preparation

- Choose a well-lit, glare free area. Have the child sit or stand to take the test.
- Set up so that the cards will be 16 inches from the child’s eyes (check distance with cord provided).
- Make sure the cards are at the child’s eye level.
- Be sure there is no glare on the surface of the cards.
- If the child wears glasses, test him/her with glasses on. (Place the polarized glasses over the child’s glasses.)
- To preserve the polarized glasses, avoid touching them. To clean the lenses, use no liquid. A regular soft dry cloth is recommended, but do clean the stems and frames in between uses.

Steps to Conduct Assessment of Stereopsis with a Smile (PASS 2)

The back of each card is labeled. Begin with Card A (demonstration card). This card has a two dimensional smile face, and is used for training purposes.

Step 1

Put the polarized glasses on the child. If a child wears glasses, place the polarized glasses over the glasses. Ask the child to point to or identify the smile face on card A. Tell the child the figure is “popping” off the card and ask the child to point to it. This allows you to be certain the child can identify the figure.

Step 2

Next allow the child to look at card B and the blank card side by side at 16 inches, in front of the child at a 10 degree angle (top of card tilted back towards the screener.) Tell the child to point to the card with the smile face. If the child cannot successfully identify card B, stop testing.

Step 3

Shuffle the cards behind your back to change the position of the smile face. Present the cards to the child side by side. Repeat a maximum of five times.

Step 4

The child is successful if the child is able to identify the card with the smile face 4 of 4 or 4 of 5 presentations. The child is unsuccessful if he/she answers incorrectly one or more times.

Step 5

If a five year old or above successfully identifies 2 or more presentations of card B, replace card B with card C and repeat the same procedure again with card C and the blank card.

Step 6

The child is successful if the child is able to identify the card with the smile face 4 of 4 or 4 of 5 presentations. The child is unsuccessful if he/she answers incorrectly one or more times.

Record Results

School-Age Vision Screening Record (Form F).

Tips

- Always watch the child’s eyes to determine if the child is looking at both cards before identifying the card with the smile face. It is a good idea to remind the child each time to look at both of the cards before pointing.
- Be sure to separate the cards sufficiently to be able to determine which card the child has selected as having the smile face. Avoid creating patterns of presentation (i.e. R,L,R,L or R,R,L,L).
- Ensure that the arrow on the back of each card is pointing up. Always hold the blank card at exactly the same distance from the child as the other card.
- It may take several seconds for the child to see the Smile Face. Suggest that the Smile Face is hiding to encourage the child to continue looking for it.
- Store the stereo test in a cool dry place when not in use. High heat and humidity may cause the test to fade.

Rescreen

At least one day following the non-pass screening, but in no case later than 4 to 6 weeks. If rescreen is not feasible, a referral should be made.

Referral Criteria

If a five year old child does not correctly identify 2 out of 2 cards B or 4 out of 4 out of 5 presentations on Card C.

**School-Age Vision Screening Stereopsis Option 2:
Random Dot E (RDE) Phase Out 2020-2021 School Year
Kindergarten and First Grade Unless New or Transfer.**

Equipment

1. Random Dot E (RDE) demonstration card.
2. One blank test card.
3. One stereo “E” test card.
4. Pair of polarized glasses.

Preparation

- Have the child sit or stand to take the test in a well-lit, glare free area.
- Measure the 6.5 foot screening test distance and mark it using masking tape.
- Make sure the cards are at the child’s eye level.
- Ensure it is 6.5 feet from the child’s eyes to the cards.



Steps to Conduct RDE Stereopsis Screening

Step 1

Put the polarized glasses on the child. If a child wears glasses, place the polarized glasses over the glasses.

Step 2

Show the child the raised E figure on the demonstration card. Tell the child the E is “popping” off the card and ask the child to point to it. This allows you to be certain the child can identify the E figure. Present the demonstration E card with the blank card and ask the child to point to the card with the “E”.

Step 3

Present the test “E” card with the blank card. Allow the child to look at both test cards at twenty (20) inches. Tell the child to point to the card with the “E.” Shuffle cards behind your back and again ask the child to point to the card with the “E”. Repeat 2 to 3 more times.

Step 4

When the child understands the task, move back to the screening test distance of six and half feet.

Step 5

Present the test “E” card with the blank card. Tell the child to point to the card with the “E.” Shuffle cards behind your back and again ask the child to point to the card with the “E”. Repeat 2 to 3 more times. Shuffle the cards behind your back after each presentation. The child is successful (passes) if he/she is able to identify the card with the “E” on 4 of 4 presentations.

Record Results

School-Age Vision Screening Record (Form H).

Tips

If the child wears glasses, test him/her with his/her glasses on.

Rescreen

At least one day following the non-pass screening, but in no case later than 4 to 6 weeks. If rescreen is not feasible, a referral should be made.

Referral Criteria

A child must correctly identify the E on the stereo test card correctly 4 out of 4 times at a screening test distance of 6.5 feet.

**School-Age Vision Screening Color Vision Screening:
Kindergarten or First Grade Unless New or Transfer.**

Screening for Color Deficit is required because of the educational implications and vocational limitations of defective color vision. Screening for Color Deficit is done so, if needed, teachers may adjust educational materials and the child and family can make an informed vocational decision.

Only males are required to be screened since color deficiency is sex linked; 5 to 8% of the male population is color deficient, while in females it is less than 0.4%.

Equipment

Approved for Color Deficit Screening

- 1. Ishihara - 14 plate
- 2. Pseudoisochromatic color testing - 16 plate/Color Check Complete Vision Screener
- 3. Color Vision Testing Made Easy

Preparation

- Color Deficit screening should occur for boys either in kindergarten or at the child’s initial screening. If the child was not enrolled at the school in kindergarten, he should be screened in first grade.



Steps to Conducting the Test

Step 1

Show the testing book to the child. Tell the child to trace the shape, letter or number he sees using a clean cotton swab or similar instrument. The child should not be allowed to use his fingers or hands to touch the pages. Special attention should be given to proper lighting when screening with pseudoisochromatic plates. Follow the manufacturer’s instructions.

Tips

- Correct lighting is essential to the proper administration of a screening using these plates.
- Failure to use proper light for color test makes the results invalid.
- To screen for the detection of color deficiency in males, the recommended test is a book of pseudoisochromatic plates. These tests resemble books with pages in which persons with normal red-green color vision can discern objects, shapes or numbers. There are many different manufacturers producing pseudoisochromatic plates and they are available from different suppliers. Because pseudoisochromatic plate tests differ, you should follow the manufacturer’s instructions as to the administration of the test relative to distance, and the passing or failing scores.

- Results should be noted on the child’s school health record. The parents/guardians may choose to take the child for an eye examination to confirm the existence of color deficiency and to discuss its implications for their child. No further school follow-up is required. Parents/Guardians may choose to have the condition diagnosed by an Optometrist or Ophthalmologist.

Record Results

School-Age Vision Screening Record (Form H).

Rescreen

At least one day following the non-pass screening, but in no case later than 4 to 6 weeks. If rescreen is not feasible, a notification should be made.

Referral Criteria:

For pass/fail criteria, follow the manufacturer’s guidelines. Notification of results to parents and teachers is necessary. Utilize the parent Color Vision Letter (Letter C).

School-Age Vision Screening Optional Screening Test

Option 1: Near Visual Acuity

Option 2: Modified Clinical Technique

School-Age Vision Screening Option 1: Near Visual Acuity:

Near Visual Acuity is not a mandatory test. Screening for near acuity may be appropriate when there are concerns regarding a child’s ability to see close up or a child exhibits signs of eyestrain or headaches after near work, loses his place when reading or complains of blurriness when reading or after any extended near activity.

Equipment

- 1. Near point acuity cards/charts (HOTV, Letters or LEA Symbols) with pre-measured cord and approved occluder.

Preparation

- Make sure the room in which you are screening has no distractions, is quiet and well-lit. As the card or chart is presented, make sure it is free from glare.

Steps to Conduct Near Visual Acuity:

Step 1

Position the child and use the attached cord to determine the distance to the child’s face. Do not allow the child to lean the head or torso forward. Pre-measured cords when pulled and kept taut, maintain an optimal test distance (16 inches per most manufacturer’s instructions).

Step 2

Test the child with both eyes. If the child wears glasses test with glasses on.

Step 3

Ask the child to read one symbol/letter on each line as directed starting at the top line. Do not cover or mask symbols/letters in an attempt to enhance performance. If the first symbol/letter is correctly identified, the next smallest size is shown. This process continues with the first symbol/letter on each line through 20/32 or until the child gives an incorrect response.

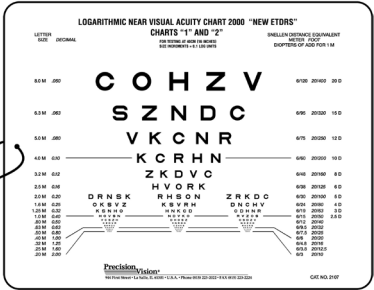
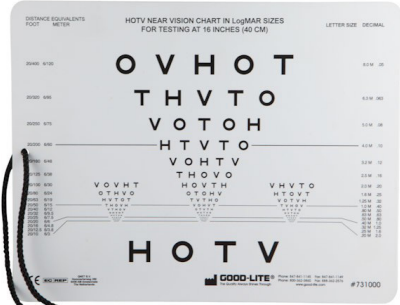
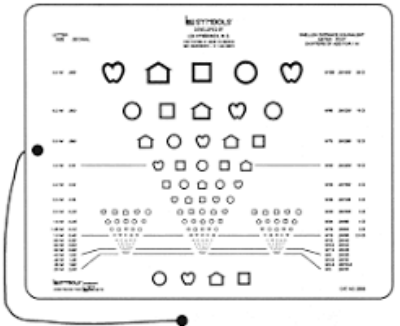


Image by Percision Vision



www.macgill.com



www.lea-test

Step 4

Next, ask the child to name all 4 symbol/letter on the line above the one with the first missed the symbol (i.e., last line with correct symbol identification).

- If the child identifies either 3 of 3 or 3 of 4 correct, continue to test successively smaller shapes until 2 on a line are missed.
- If the child was unable to correctly identify at least 3 of 4 correct on that line, test successively larger lines until 3 of 3 or 3 of 4 on a line are correct.

The near visual acuity is the smallest line for which at least 3 of 3 or 3 of 4 symbols/letters are correctly identified on line 20/32.

Step 5

Record Results

School-Age Vision Screening Record (Form H).

Tips

- If the child wears glasses test with glasses on.
- Watch to be sure the child is not peeking, tilting the head or squinting.

Rescreen

At least one day following the non-pass screening, but in no case later than 4 to 6 weeks. If rescreen is not feasible, a referral should be made.

Referral Criteria

A referral is made for a child whose visual acuity is 20/40 or worse. To pass the Letter or LEA Symbols® chart with a 16” cord, a child must be able to identify 3 out of 3 or 3 out of 4 on the passing line, which is 20/32, with both eyes together.

**School-Age Vision Screening Option 2:
Modified Clinical Technique:**

Modified Clinical Technique

Only persons qualified and licensed, such as optometrists and ophthalmologists, may administer this screening.

The Modified Clinical Technique (MCT) test may be used in any School-Age grade.

School-Age Vision screening will consist of one or more of the following:

1. Distance visual acuity – ability to see objects far away
2. Binocular vision – how well your child’s eyes work together
3. Color vision – ability to see colors
4. Near visual acuity – ability to see objects up close

Equipment

Approved equipment for the MCT test

The equipment used may vary but routinely includes the following: a visual acuity projector, occluder, fixation targets, prisms, retinoscope, +1.50 lenses, lens bar, ophthalmoscope and internal inspection for ocular health disorders.

Record Results

School-Age Vision Screening Record (Form H).

Referral Criteria

- 1) 20/40 or less, either eye, (2) Refractive Error a. Hyperopia +1.50 Diopter Sphere or more. b. Myopia -0.50 Diopter Sphere or more. c. Astigmatism 1.00 Diopter Cylinder or more. d. Anisometropia 1.00 Diopter or more. (3) Cover test any tropia or significant phoria at distance (20 feet) or near (16 inches). (4) Ocular health disorders e.g., any disease or medical anomaly of the eye and/or adnexa.


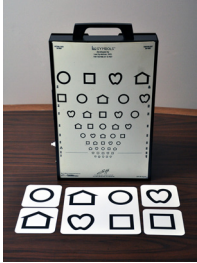



Screening by Eye Care Professionals Preschool and School-Age






School or public health vision screenings for children may be conducted by ophthalmologists or optometrists according to the guidelines within this document. Parents/guardians must be informed that this is a screening and not a comprehensive eye examination.

The Vision Advisory Committee stresses that eye care professionals conducting screenings in schools shall not make direct referrals to their own practices. Unacceptable methods related to referral include the sending of screening results on provider letterhead as well as the use of any provider identifying material on the screening and referral forms.


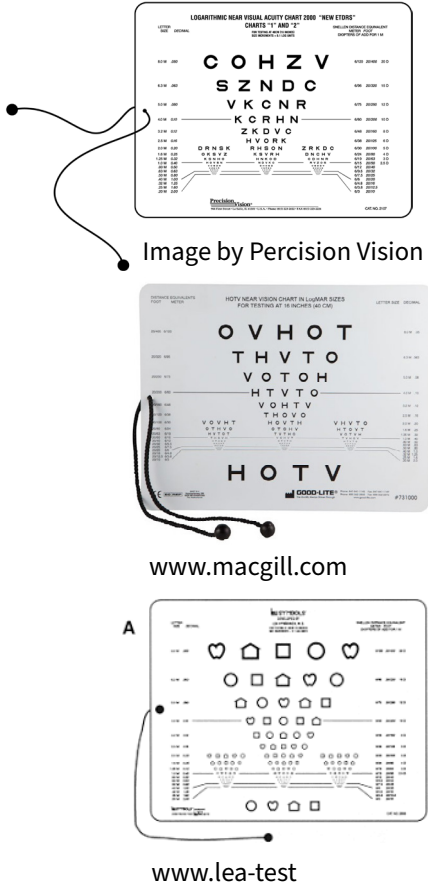
School-Age Vision Guidelines Summary of Requirements

Note: If the child has a two line difference between his/her eyes (e.g., reads 20/32 and 20/50 in the other eye). The difference may be an indication of Amblyopia and a referral should be made.

Pre-Test		Referral Criteria	
Observation		Refer for any appearance or behavior concerns or complaints.	
Image and Visual Acuity Test		Referral Criteria	School Age
 VIP single, crowded LEA Symbols® VA screening test system at 5 feet		A referral is made if a child misses 2 or more of the first 4 symbols or 2 or more of the second 4 symbols on the disk for either the right OR the left eye. If a child misses 2 or more symbols during presentation of the baseline cards. Utilize Form D: 4-5 Year old Child, for Kindergarteners and First graders.	K and 1st and those whose first lanuage is not English.
 LEA Symbols at 10 feet		A referral is made for children whose visual acuity is 20/40 or worse in either eye. To pass the LEA Symbols Chart, a child must be able to identify 3 out of 5 symbols on the passing line, which is 20/32, with each eye separately. If a child has a two line difference between his/ her eyes (e.g., reads 20/32 and 20/50 in the other eye).	K and 1st only.
 SureSight Vision Screener		A referral is made if there is an asterisk (*) next to a reading on the LCD screen. ODH requires using the Vision in Preschoolers Study (VIP) criteria when using the Suresight Vision Screener.	K and 1st only.
 Retinomax (Retinomax 2 or above)		ODH requires using the Vision in Preschoolers study (VIP) criteria when using the Retinomax Vision Screener.	K and 1st only.
 JAEB Vision Screener: JVAS		A referral is made on a child who fails the age appropriate visual acuity threshold automatically identified by the JVAS program.	K, 1st, 3rd, 5th, 7th, 9th, and 11th.

 SLOAN chart at 10 feet	A referral is made on 20/40 or worse in either eye. To pass the child identify the letters on the 20/32 line with each eye: 1-3 optotypes = no misses 4-7 optotypes = one miss 8-11 optotypes = two misses	K, 1st, 3rd, 5th, 7th, 9th, and 11th.
 Titmus Vision Screener	Follow the manufacturer's instructions when operating the Titmus for referral criteria.	1st, 3rd, 5th, 7th, 9th, and 11th. (Phase out 2020-2021 School Year)
 Keystone Vision Screener	Follow the manufacturer's instructions when operating the Keystone for referral criteria.	1st, 3rd, 5th, 7th, 9th, and 11th. (Phase out 2020-2021 School Year)
 Preschool Assessment of Stereopsis with a Smile (PASS 2)	If a five year old child does not correctly identify 2 out of 2 cards B or 4 out of 4 out of 5 presentations on Card C.	K and 1st or initial screening
 Random Dot E (RDE)	A child must correctly identify the E on the stereo test card correctly 4 out of 4 times at a screening test distance of 6.5 feet.	K and 1st or initial screening (Phase out 2020-2021 School Year)

*Not necessary if using the VIP single, crowded LEA Symbols® VA screening test system at 5 feet.

Color Vision Test	Referral Criteria	School Age
 <p>Color Vision Screening</p>	<p>Follow the manufacturer's guidelines. Notification of results to parents and teachers is necessary. Utilize the parent Color Vision Letter (Letter C).</p>	<p>K or 1st or initial screening</p>
Optional-Screening Test	Referral Criteria	
 <p>Image by Percision Vision</p> <p>www.macgill.com</p> <p>A</p> <p>www.lea-test</p>	<p>A referral is made on a child whose visual acuity is 20/40 or worse with both eyes. To pass the letters or LEA Symbols® with a 16" cord, a child must be able to identify 3 out of 3 or 3 out of 4 symbols on the passing line, which is 20/32, with both eyes together.</p>	<p>K, 1st, 3rd, 5th, 7th, 9th, and 11th.</p>

If the child has a two line difference between their eyes (e.g., reads 20/32 and 20/50 in the other eye). The difference may be an indication of Amblyopia and a referral should be made.

Referral Procedures and Follow Up

Vision screening is a public health strategy used to efficiently identify children with or at risk for vision disorders. Screening will produce both over referrals and under referrals; however, for the benefit of the child being screened, errors toward false positives, i.e., over referrals, are preferred.

Screeners should monitor the accuracy of their referrals. One way this may be done is to compare the school screening results with the findings of the eye specialist examination. Not all appropriate referrals will result in treatment, but if there are frequent discrepancies between the screening and exam results, screening methods should be reviewed.

The following steps are recommended for an effective assessment program:

- Written notification of the screening results should be reported in the family's preferred language and placed in a sealed envelope addressed to the parent or guardian of the child screened. This notification will inform the parents that their child has failed a vision screening and that a professional vision examination is recommended. Utilize the School Vision Screener, Referral Letter for parents (Letter B).
- Along with this notification, parents/guardians should receive a copy of the Eye Specialist Report (Form J), to be completed by the examining doctor and returned to the referring party and vision resources list.
- Results of the child's vision screening should be entered on the Vision Screening Record and tracked by the screener. (Form H).
- Children who failed the vision screening should receive follow up to assure proper treatment. Utilize the Vision Screening Follow Up Record to track child who need follow up (Form G Preschool and Form I School-Age child).
- Children who were referred within the past year and have no written documented follow-up care on the Eye specialist report Form J, should receive the Follow Up Referral Parent Letter (Letter D). This is a secondary measure to ensure parents/guardians receive a reminder that the school is still in need of receiving the Eye care specialist report (Form J).
- Report vision screening data by school building by June 1 annually to ODH (mandated by Section 3313.50 CRC). Data shall be submitted electronically by accessing the Annual School Vision Screening Form Data link (Form L).

Forms used for vision screening and follow-up may be downloaded from the ODH Web site <http://www.odh.ohio.gov> or photocopied from the examples in the Forms section of this document.

ODH Contact Information

Current ODH requirements are available on the Web site at <http://www.odh.ohio.gov>. Vision Screening Guidelines and Requirements booklets are available on a limited basis by sending a request to:

Children’s Hearing and Vision Program
Bureau of Maternal, Child and Family Health
Ohio Department of Health
246 N. High Street
Columbus, Ohio 43215

Phone: (614) 644-0139
Fax: (614) 728-9163

To request the substitution of one grade for another or document approval, send written documentation of need to the program administrator of the Children’s Hearing and Vision Program at the above address. Documentation shall consist of the grade to be changed or added, specific rationale for the request and duration of the substitution. Permission to substitute grades will not be granted for preschool, kindergarten, first and third grades.

Risk Factors for Vision Disorders

The most frequently occurring vision disorders of public health significance are amblyopia, refractive error and strabismus.

There are many factors that can determine if your child is at high risk for vision problems. The following is a list of some of those factors.

- Children with a blood relative with a vision loss in one or both eyes before age 25 that was not caused by an injury and was not corrected with glasses.
- Children born more than six weeks before the expected due date; children spending any time in the neonatal intensive care unit, or the special care nursery; or children weighing less than 3 pounds and 5 ounces at birth.

Birth mother with any of the listed health problems during pregnancy:	
Rubella (German measles)	Exposure to radiation
Histoplasmosis	AIDS
Herpes	Drug abuse
Toxoplasmosis	Venereal infection
Cytomegalovirus	Alcohol abuse
Birth mother taking any of the listed medications during the pregnancy:	
Dilantin (for seizures steroids)	Coumadin (blood thinner)
Phenobarbital (for seizures)	Quinine (for malaria)
Chloroquine (for malaria)	Medicine for cancer
	Accutane
Child with any of the listed illnesses or injuries:	
Meningitis/encephalitis	Hydrocephalus
Early closing of skull bones	Cerebral palsy
Growing too fast or too slow	Leukemia
Problems with genes (i.e. Down or Marfan’s Syndrome)	Developmental disabilities/delays
Swelling of joints, pain in joints	Diabetes
Thyroid problems	Cancer
Herpes infection	A lot of freckles under the arm pit or in the groin area
Albinism	Severe head injury
Sickle cell disease	Problem with the brain that gets worse over time
Eye tumor	Any illness treated with steroid shots, pills or liquid
Tan spots bigger than a quarter	Inability to do things child was once able to do
Brain tumor	Weakness, along with problems relaxing muscles
Injury directly to eye or eye socket	

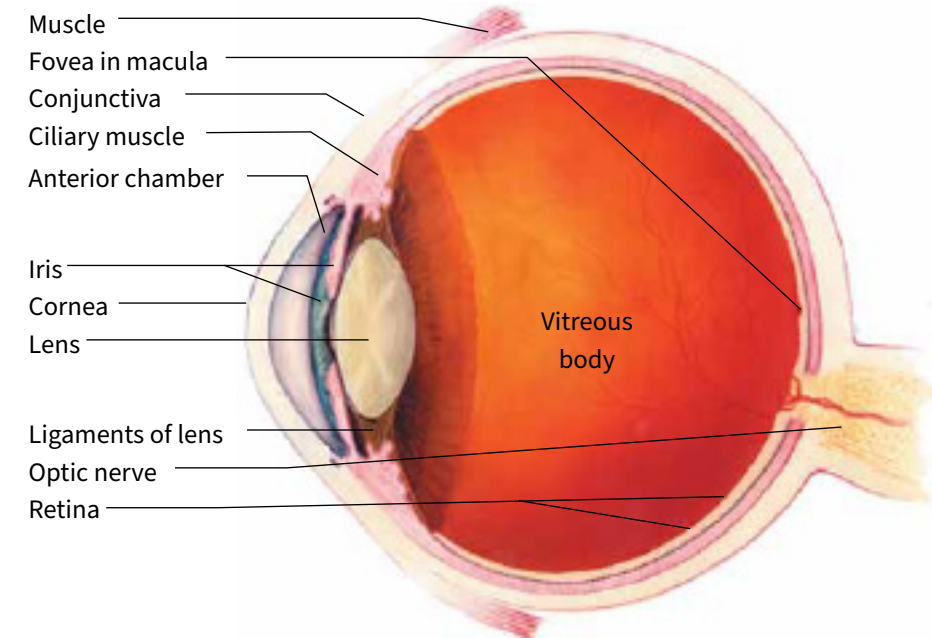
How Normal Vision Develops

Often children cannot tell you how they see. Vision problems may not be obvious. Most vision problems are not painful. Even after looking at children’s eyes, and watching how they act, it may still be difficult to recognize that they have vision problems.

During the early years of life, children learn to use their eyes. At first, babies learn to recognize familiar faces. Next, they begin to figure out how to reach and hold onto things that they see. They look at pictures and start to draw. By the age of four, children may be able to draw and name pictures and to copy shapes and letters. To do these things, children must have usable vision.

Babies who have vision problems may learn to “see” in a way that is different from babies with normal vision. Babies or toddlers with vision problems may need help to learn skills like eating, playing with toys, or naming common things (like a ball, a book, or a shoe). Children who may have vision problems need help during the first years of life.

Without help, children may not be able to “catch-up” later, even if the vision problem is corrected and their vision is normal. Children with vision problems may have trouble with school work. As adults, they may have trouble learning job skills. That is why it is very important to screen the vision of young children to identify vision problems or potential vision problems as early as possible and to help assure children with vision impairments get the special help they need.



For a person to see normally, all parts of this visual system must work. The visual system is not fully developed at birth. An infant with normal vision will not be able to see things as clearly as an adult with normal vision. The baby’s eyes do not work together all the time until about four months of age. Pathways carrying signals to the brain, and the brain itself, continue to develop during the early years of life.

As the eye and the visual cortex of the brain develop, a child’s ability to see detail improves. As the eyes begin to work together, the brain learns to combine the images from the two eyes into a single image. The child learns how to use the signals in the brain to recognize things, such as faces and toys, and to tell the difference between things that look similar. Vision continues to develop until a child is at least 9 years old.

In order for a person to see, several things must happen:

- 1 The eyes must be able to catch light and send signals to the optic nerve of each eye.
- 2 The optic nerves of each eye must be able to send signals to the brain’s visual cortex, the “seeing brain.”
- 3 The visual cortex must be able to put together the signals from each eye to create one view of the world.

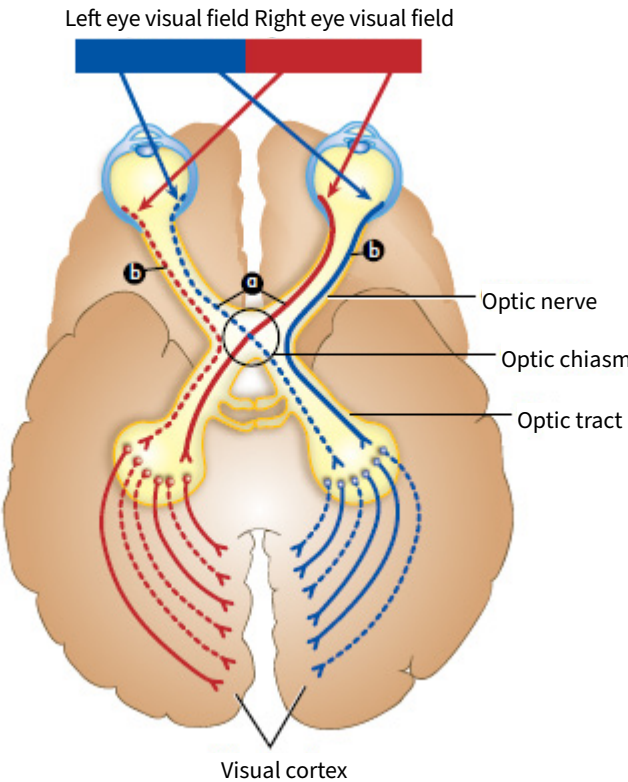


The Visual Pathway

Vision is generated by the retina as information leaves the eye by way of the optic nerve, and there is a partial crossing of nerves at the optic chiasm. From the optic chiasm the nerves are called the optic tracts and synapse at the lateral geniculate nucleus. From there, they travel to the primary visual cortex at the back of the brain.

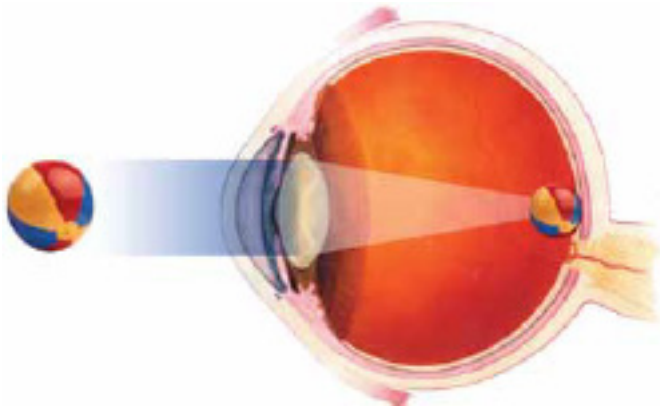
The brain works on a crossed wire system. Each eye is divided into right and left visual fields. Each eye gets information from both visual fields. To ensure that the brain doesn't get extraneous information, the nerves from the retina divide themselves out into separate pathways. The inner visual field retinal nerves (a) cross over at the optic chiasm — whereas the lateral nerves (b), do not cross.

Damaging the visual system before the optic chiasm will affect one eye, both visual fields —analogous to closing one eye. Damaging the pathway after the chiasm, though, will damage parts of both eyes, and only one visual field. If you could imagine, the field of view seen would be only 90°, from straight ahead to one side.



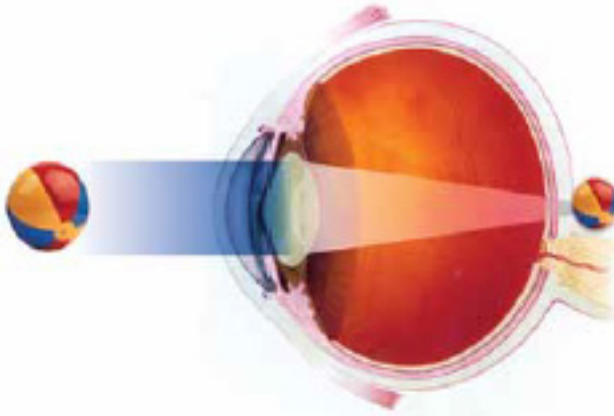
NORMAL EYE

In a normal eye, light enters our eye through the pupil. The cornea, at the front of our eye, bends the light. The light passes through the lens to the retina. It then focuses on the retina, like a little picture of whatever we are looking at. Nerve cells in the retina send that “picture” to our brain.



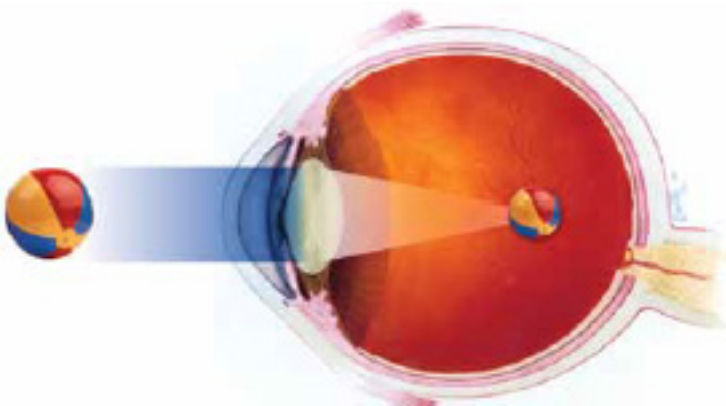
HYPEROPIA Farsighted

Those with hyperopia see distant objects clearly, but close up objects appear blurry. Farsightedness occurs if your eyeball is too short or the cornea has too little curvature, so light entering your eye is not focused correctly.



MYOPIA Nearsighted

Those with myopia see near objects clearly, but far away objects appear blurry. With myopia, the eyeball is too long, or the cornea is too steep, so images are focused in the vitreous inside the eye rather than on the retina at the back of the eye.



Conditions That Can Interfere With Normal Visual Development

There are many conditions that interfere with normal visual development. The most common ones are described in this section.

Genetic Syndromes

Some vision problems are part of a group of conditions (syndrome). Some syndromes, such as Marfan’s or Usher’s, run in the family. Other syndromes, such as Downs, are caused by a genetic problem that occurs at the time of conception.

Prenatal illness in Mother

Some illnesses that a mother may have while she is pregnant can cause vision problems. Some examples are toxoplasmosis, rubella (German or three-day measles), cytomegalovirus, genital herpes, and syphilis.

Perinatal Conditions

Problems that occur around the time a baby is born can cause difficulties with vision. Some examples are prematurity, low birth weight, problems that cause a baby not to get enough oxygen at birth or being on a ventilator. Babies who weigh less than 3 pounds, 5 ounces at birth have four to five times the rate of vision problems than infants who weigh more.

Refractive Errors

When light enters the eye, it is bent so that it focuses on a place at the back of the eye called the retina. When light focuses correctly, it causes a clear image to be formed on the retina. A refractive error occurs when the light does not focus on the retina and a clear image is not formed. There are three types of refractive error: myopia or nearsightedness (distance visual acuity worse than near visual acuity); hyperopia or farsightedness (near visual acuity worse than distance visual acuity); and astigmatism (poor distance and near visual acuity). A large difference between the refractive errors of the two eyes is called anisometropia.

Refractive errors can usually be corrected with glasses or contact lenses. Most young children have a mild degree of farsightedness.

Muscle Imbalance

Each eyeball has six muscles connected to it. These eye muscles hold the eyeballs in place, and make the eyes move up, down, and to the side. When the muscles work correctly, the eyes move together. Strabismus, a form of muscle imbalance, occurs when a person’s extraocular muscles do not work together properly.

When the eyes are not properly aligned, a child sees two images. The brain cannot make sense of both images at the same time, so it ignores the image from the deviating eye. If the image is ignored for too long, the visual acuity in that eye will decrease and depth perception will be impaired.

Types of muscle imbalances are esotropia (one eye turns in), exotropia (one eye turns out), hypertropia (one eye turns up), or hypotropia (one eye turns down). Sometimes the muscle imbalance is small and not obvious. Atropia can be constant or intermittent.

Muscle imbalances run in families, and generally are not associated with any other physical problem. In some cases, muscle imbalances occur when a nerve to the muscle is damaged, when the part of the brain that controls eye movement is damaged, or when one eye has poorer visual acuity than the other.

Treatment for strabismus depends on what causes it. Most muscle imbalances can be treated with glasses, eye drops, surgery, and in some cases eye exercises.

Nystagmus

Nystagmus is a name for a condition that causes the eyes to move in a rhythmic, jerky manner. The eyes of most people with nystagmus move from side to side. In other cases of nystagmus the eyes may move up and down, in a circle, diagonally, or in a combination of directions. It can be associated with other disorders, so child with nystagmus should be seen by an eye care provider as early as possible.

A child with nystagmus does not see objects moving, but does have reduced vision. The child may be able to quiet the eye movements by holding the head and eye in a certain direction, thus getting better visual acuity.

Cataracts

Cloudiness in a part of the eye called the lens is called a cataract. This cloudiness scatters light as it enters the eye or keeps light from entering the eye. It is important for a young child with cataracts to be treated early, so that the visual system can develop normally. Cataracts can be caused by illnesses of the mother during pregnancy and from certain drugs used during pregnancy. It can be a part of a syndrome such as Downs or Marfan’s. Cataracts can be treated by surgery. Afterwards, a child must wear a contact lens or glasses (if cataracts were removed from both eyes) to focus properly. Older children may be treated by a surgical procedure that involves implanting a lens within the eye (intraocular lens implant).

Retinal Detachment

The retina is a thin layer of tissue that lines the inside of the eye. Retinal detachment occurs when part of the retina is separated from the back of the eye and loses its source of nourishment. Blindness develops in the area of the visual field that relates to the part of the retina that is separated.

Retinal detachment can be caused by several conditions. Some examples are severe head injury, as seen in child abuse or shaken baby syndrome, or direct trauma to the eye. Usually surgery is needed and, if successful, some of the vision is restored.

Retinopathy of Prematurity (ROP)

ROP is a condition which can cause retinal damage, including detachment, in babies who are born several weeks before their due date. It appears to occur most often in infants with a low birth weight who have received oxygen over a long period of time. When the retina is not fully developed, it is more likely to form abnormal blood vessels and tissue that can lead to retinal detachment. Laser surgery can be used in some cases to treat the retina and prevent retinal detachment; sometimes the retina detaches anyway, and more extensive surgery is required. It is important to follow a child who has been treated for retinopathy of prematurity, because the child remains at high risk for developing problems with visual acuity, muscle imbalances, and retinal problems in the future.

Retinoblastoma

Retinoblastoma is the name of a malignant eye tumor that can cause death if it is not treated. Most retinoblastomas occur in children under 3 years of age. It is usually found when a doctor examines the eyes and notices a difference in the reflex coming from the back of each eye. It may not be noticed until it causes the eye to look cloudy or until the child develops a muscle imbalance. If the tumor is found very early, it is possible to shrink it with radiation. Sometimes, some vision can be saved. Often, the eye must be removed. An artificial eye can be placed in the eye socket to give the child a more natural appearance. Retinoblastoma can be hereditary.

Appendix A

State Laws Pertaining to Vision and Hearing Screening Programs

Ohio Revised Code 3313.50. Record of tests; statistical data; individual records. Boards of education and boards of health making tests for determining defects in hearing and vision in school children shall keep an accurate record of such tests and of measures taken to correct such hearing and visual defects. This record shall be kept on a form to be prescribed and furnished or approved by the director of health. Statistical data from such records shall be made available to official state and local health, education, and human services departments and agencies. Individual records shall be made available to such departments and agencies only in cases where there is evidence that no measures have been taken to correct defects determined by such tests, provided that such records shall be made available to school authorities where they are deemed essential in establishing special education facilities for children with hearing and visual defects.

Ohio Revised Code 3313.643. Eye protective devices Every student and teacher of a school, college, or other educational institution shall wear industrial quality eye protective devices at all times while participating in or observing any of the following courses: (A) Vocational, technical, industrial arts, fine arts, chemical, physical, or combined chemical-physical educational activities, involving exposure to: (1) Hot molten metals or other molten materials; (2) Milling, sawing, drilling, turning, shaping, cutting, grinding, buffing, or stamping of any solid materials; (3) Heat treatment, tempering, or kiln firing of any metal or other materials; (4) Gas or electric arc welding or other forms of welding processes; (5) Repair or servicing of any vehicle; (6) Caustic or explosive materials; (B) Chemical, physical, or combined chemical-physical laboratories involving caustic or explosive materials, hot liquids or solids, injurious radiations, or other hazards. Such devices may be furnished for all child’s and teachers, purchased and sold at cost to child’s and teachers, or made available for a moderate rental fee, and shall be furnished for all visitors to such shops and laboratories. The superintendent of public instruction, or any other appropriate educational authority designated by the superintendent, shall prepare and circulate to each public and private educational institution in this state instructions and recommendations for implementing the eye safety provisions of this section. The bureau of workers’ compensation shall ensure compliance with this section. “Industrial quality eye protective devices” as used in this section, means devices meeting the standards of the American national standard practice for occupational and educational eye and face protection, Z87.1-1968, approved by the American national standards institute, inc., and subsequent revisions thereof, provided such revisions are approved and adopted by the industrial commission.

Ohio Revised Code 3313.673 Screening of beginning pupils for special learning needs. (A) Except as provided in division (B) of this section, prior to the first day of November of the school year in which a pupil is enrolled for the first time in either kindergarten or first grade, the pupil shall be screened for hearing, vision, speech and communications, and health or medical problems and for any developmental disorders. If the results of any screening reveal the possibility of special learning needs, the board of education of the school district shall conduct further assessment in accordance with Chapter 3323. of the Revised Code. The board may provide any of the elements of the screening program itself, contract with any person or governmental entity to provide any such elements, or request the parent to obtain any such elements from a provider selected by the parent. If the board conducts hearing and vision screening itself or contracts for hearing and vision screening, such screening shall be conducted pursuant to sections 3313.50, 3313.69, and 3313.73 of the Revised Code.

(B) Prior to the first day of August of the school year in which a pupil is required to be screened under this section, the board shall provide parents with information about the district's screening program. If the board chooses to request parents to obtain any screening services, it shall provide lists of providers to parents together with information about such screening services available in the community to parents who cannot afford them. Any parent requested to obtain any screening services under this division may sign a written statement to the effect that he does not wish to have his child receive such screening.

Ohio Revised Code 3313.68. Employment of medical and dental personnel; delegation of duties to board health or offices. The board of education of each city, exempted village, or local school district may appoint one or more school physicians and one or more school dentists. Two or more school districts may unite and employ one such physician and at least one such dentist whose duties shall be such as are prescribed by law. Said school physician shall hold a license to practice medicine in Ohio, and each school dentist shall be licensed to practice in this state. School physicians and dentists may be discharged at any time by the board of education. School physicians and dentists shall serve one year and until their successors are appointed and shall receive such compensation as the board of education determines. The board of education may also employ registered nurses, as defined by section 4723.01 and licensed as school nurses under section 3319.22 of the Revised Code, to aid in such inspection in such ways as are prescribed by it, and to aid in the conduct and coordination of the school health service program. The school dentists shall make such examinations and diagnoses and render such remedial or corrective treatment for the school children as is prescribed by the board of education; provided that all such remedial or corrective treatment shall be limited to the children whose parents cannot otherwise provide for same, and then only with the written consent of the parents or guardians of such children. School dentists may also conduct such oral hygiene educational work as is authorized by the board of education.

Ohio Revised Code 3313.69. Hearing and visual tests of school children; exemptions. The board of education or board of health providing a system of medical and dental inspection of school children, as authorized by section 3313.68 of the Revised Code, shall include in such inspection tests to determine the existence of hearing and visual defects in school children. The methods of making such tests and the testing devices to be used shall be such as are approved by the department of health. Ohio Revised Code 3313.73. Board of health to make examination; report; recommendations to parents. If the board of education of a city, exempted village, or local school district has not employed a school physician, the board of health shall conduct the health examination of all school children in the health district and shall report the findings of such examination and make such recommendations to the parents or guardians as are deemed necessary for the correction of such defects as need correction. This section does not require any school child to receive a medical examination or receive medical treatment whose parent or guardian objects thereto.

Ohio Revised Code 3323.19. Eye examinations for child's with disabilities. (A) Within three months after a student identified with disabilities begins receiving services for the first time under an individualized education program, the school district in which that student is enrolled shall require the student to undergo a comprehensive eye examination performed either by an optometrist licensed under Chapter 4725. of the Revised Code or by a physician authorized under Chapter 4731. of the Revised Code to practice medicine and surgery or osteopathic medicine and surgery who is comprehensively trained and educated in the treatment

of the human eye, eye disease, or comprehensive vision services, unless the student underwent such an examination within the nine-month period immediately prior to being identified with disabilities. Any child shall be exempted from a dental inspection if he has been examined for dental defects by a regularly licensed dentist, from a hearing test if he has been examined by a regularly licensed physician, and from a visual test if he has been examined by a regularly licensed physician or optometrist upon presentation to the school authorities of a certificate to the effect that he has been so examined during the twelve months immediately preceding the date of such inspections. However, no student who has not undergone the eye examination required under this section shall be prohibited from initiating, receiving, or continuing to receive services prescribed in the student's individualized education program. (B) The superintendent of each school district or the superintendent's designee may determine fulfillment of the requirement prescribed in division (A) of this section based on any special circumstances of the student, the student's parent, guardian, or family that may prevent the student from undergoing the eye examination prior to beginning special education services. (C) Except for a student who may be entitled to a comprehensive eye examination in the identification of the student's disabilities, in the development of the student's individualized education program, or as a related service under the student's individualized education program, neither the state nor any school district shall be responsible for paying for the eye examination required by this section.

Ohio Revised Code 3709.22. Duties of board of city or general health district. Each board of health of a city or general health district shall study and record the prevalence of disease within its district and provide for the prompt diagnosis and control of communicable diseases. The board may also provide for the medical and dental supervision of school children, for the free treatment of cases of venereal diseases, for the inspection of schools, public institutions, jails, workhouses, children's homes, infirmaries, and county homes, and other charitable, benevolent, and correctional institutions. The board may also provide for the inspection of dairies, stores, restaurants, hotels, and other places where food is manufactured, handled, stored, sold, or offered for sale, and for the medical inspection of persons employed therein. The board may also provide for the inspection and abatement of nuisances dangerous to public health or comfort, and may take such steps as are necessary to protect the public health and to prevent disease. In the medical supervision of school children, as provided in this section, no medical or surgical treatments shall be administered to any minor school child except upon the written request of a parent or guardian of such child. Any information regarding any diseased condition or defect found as a result of any school medical examination shall be communicated only to the parent or guardian of such child and if in writing shall be in a sealed envelope addressed to such parent or guardian.

Appendix B

Ad Hoc Vision Advisory Committee

Ohio Department of Health
Vision Advisory Committee Members

The Ohio Department of Health would like to thank the members of the Ad Hoc Vision Advisory Committee who participated in the development of the Vision Screening Requirements and Guidelines. The Ad Hoc Vision Advisory members from across Ohio provided invaluable input, critical insights, thoughtful feedback, robust discussions and additional background information. While the Guidelines have benefited greatly from their input and guidance, the views presented in this final guidelines do not necessarily represent the decisions, policies or views of individual panel members or their organizations/departments/institutions.

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New Albany Plain Local School District

Therese Gilbert, LSN, BSN, RN
School Nurse Coordinator
Lake High School

Vision Resources Appendix C

	Description	Telephone	Web address/ E-mail:
Amblyope Registry	A program, funded by the Ohio Department of Health Save Our Sight Fund, which provides free eye patches for the treatment of amblyopia, as well as compliance assistance services, free literature about amblyopia and causes, and other important services to help families of children with amblyopia. It is a voluntary registration program to increase knowledge about amblyopia, its treatment and prevention.	(877) 808-2422	Amblyopia@Nationwidechildrens.org http://www.ohioamblyoperegistry.com/
Children With Medical Handicaps (CMH)	The Children with Medical Handicaps Program (CMH) is a health care program in the Ohio Department of Health (ODH). CMH links families of children with special health care needs to a network of quality providers and helps families obtain payment for the services their children need.	(800) 755-4769	http://www.odh.ohio.gov/en/healthresources/healthcareprovidersmap.aspx
Infant SEE	Infant SEE is a program whereby optometrists provide free eye and vision assessments for infants within the first year of life regardless of a family's income or access to insurance coverage.	(888) 396-3937	http://www.infantsee.org/ https://www.aoa.org/doctor-locator-search?sso=y
Lions Clubs	Local clubs offer help for vision services such as eye exams, glasses, vision screenings, and eyeglass recycling. Clubs work to meet the needs of communities on a local and global scale, including humanitarian causes such as disaster relief, and health programs to control and prevent diabetes and diabetic retinopathy, the leading cause of vision loss among working adults.	(614) 539-5060	www.OhioLions.org . lionsoffice@ohiolions.org
Local Health Departments	Agencies that provide health care services and referrals to the local/county/city communities.	(614) 466-3543	http://www.odh.ohio.gov/localHealthDistricts/localHealthDistricts.aspx
Medicaid	Medicaid provides health care coverage to certain individuals with limited income. In Ohio, a person is entitled to free or low-cost Medicaid health care coverage if they meet specific income and eligibility requirements.	(800) 324-8680 (800) 605-3040	http://medicaid.ohio.gov/
Ohio Department of Health (ODH) Vision Screening Program	Vision Screening program provides technical assistance to those communities seeking access to vision care. Staff can be contacted to work with local health officials to develop sustainable models of care and link families to care within their communities.	(614)644-0139	http://www.odh.ohio.gov/odhprograms/cfhs/hvscr/hvscr1.aspx BCFHS@odh.ohio.gov

	Description	Telephone	Web address/ E-mail:
OneSight	OneSight provides charitable and sustainable solutions to meet vision care needs of underserved communities. OneSight works with organizations, and optical partners to operate vision centers and programs nationwide. On a local level, OneSight has a Voucher Program to meet immediate vision care needs. Leading national organizations identify patients with visual and financial need. The patients are referred to participating retail locations to receive a free pair of glasses.	(888) 935-4589	www.onesight.org info@onesight.org
Play Hard. Don't Blink. Prescription Goggle Program	The Play Hard. Don't Blink. program prescription goggle program provides qualifying children a free pair of prescription sports goggles. Designed for use by players of all sports – including but not limited to: racket sports, lacrosse, field hockey, basketball, baseball, and soccer. This program is unique to Ohio and is made possible through a grant from the Ohio Department of Health's Save Our Sight Program. For more information or to apply online, visit the Play Hard. Don't Blink. website: www.playhardgear.com .	(614) 527-6799	www.playhardgear.com www.ohioeye.org
Prevent Blindness Vision Care Outreach	Qualifying low income families (children and adults) can receive free comprehensive eye exams and/or glasses. Please call 1-800-301-2020 or visit the website https://ohio.preventblindness.org/vision-care-outreach-program .	(800) 301-2020	http://ohio.preventblindness.org/
Prevent Blindness Preschool Vision Screening Training Program	A program, funded by the Ohio Department of Health Save Our Sight Fund, which offers free preschool vision screening training to equip individuals to vision screen children ages 3-5. The evidence-based training includes instruction on observing potential vision problems, distance visual acuity, stereopsis testing and referral/ follow-up procedures. Successful completion of the training class results in a three-year national certification as a preschool vision screener and the receipt of screening charts and tools. The training program follows Ohio Department of Health Preschool Vision Screening Guidelines.	(800) 301-2020	www.Wiseabouteyes.org/trainings http://ohio.preventblindness.org/

	Description	Telephone	Web address/ E-mail:
Realeyes Education Program	Realeyes is a FREE classroom education program created by the Ohio Optometric Association led by local optometrist, through a grant from the Ohio Department of Health Save Our Sight Fund. Realeyes includes four standardized, interactive, age-appropriate curricula that are presented by volunteer optometrists in the community. Topics covered include eye anatomy, eye safety and eye disorders.	(800) 874-9111	https://associationdatabase.com/aws/OOA/pt/sp/home_page
Sight for Students	Sight for Students is a Vision Service Plan (VSP) charity that provides free vision exams and glasses to low-income, uninsured children. The program operates nationally through a network of community partners who identify children in need and VSP network doctors who provide eye care services.	(888) 290-4964	http://www.sightforchild's.org/sfsinfo@vsp.com
State Medical Board of Ohio	Agency responsible for the licensure and discipline of Ohio physicians.	(614) 466-3934	https://license.ohio.gov/lookup/default.asp?division=78
The Ohio Center for Autism and Low Incidence (OCALI)	The Autism Center at OCALI serves as a clearinghouse for information on research, resources, and trends to address the autism challenge. The center offers training, technical assistance, and consultation to build professional and program capacity to foster individual learning and growth.	(866) 886-2254 (866) 88-OCALI	http://www.ocali.org/center/autism
VisionUSA	A program provided by doctors of optometry that provides basic eye health and vision care services free of charge to uninsured, low-income people and to families that do not qualify for government aid or private health care assistance.	(800) 766-4466	http://www.aoafoundation.org/vision-usa/who-is-eligible/ http://www.aoafoundation.org/vision-usa/
Vocational Eyewear Program	The Ohio Ophthalmological Society provides protective goggles and eyewear to youth vocational classrooms in Ohio in an effort to reduce eye injuries in the classroom and workplace settings. Teachers apply directly to the program before the beginning of the school year to get equipment for their classrooms. This program is funded through the Ohio Department of Health's Save Our Sight Program. For more information, visit the Play Hard. Don't Blink. website.	(614) 527-6799	www.playhardgear.com

Retailers in your area may provide free or reduced eye exams and glasses. Check your local listings.

Letter: A

[School Letterhead]
School Vision Screening Information Letter

Date: _____

To: Parent(s)/Guardian(s) of _____

Vision screenings will be administered on _____ to all children in preschool, kindergarten, first, third, fifth, seventh, ninth, and eleventh grade as required by state law.

Why is it important to have your child’s vision screened?

Young children with vision problems do not know the way that they see the world is not the way they should be seeing it! Without early detection and treatment, children’s vision problems can lead to permanent vision loss and learning difficulties.

Vision screening will consist of one or more of the following:

- 1. Distance visual acuity — ability to see objects far away
- 2. Binocular vision — how well your child’s eyes work together
- 3. Color vision — ability to see colors
- 4. Near visual acuity — ability to see objects up close

How will the results be shared?

If your child passes the vision screening, you may receive a letter from your school nurse with the results. You are welcome to contact the nurse or other medical personnel to learn the screening findings.

If your child does not pass the vision screening, the school nurse or other medical personnel will send a letter to share the results and may make a recommendation for further evaluation by an eye care specialist.

If you have any questions about the school vision screening program please call the school nurse or other medical personnel.

Screening (Contact Person)

Phone/Fax/Email

Letter: B

[School Letterhead]
SAMPLE Referral Letter for Parents

School Vision Screening Referral

Date: _____ To: Parent(s)/Guardian of _____

The vision screening findings are listed below indicate your child results:
Your child’s vision was screened at school. Vision screening is routinely conducted in schools as required by state law. School vision screening is performed to determine if your child has a vision problem that could interfere with learning.

Screening Test	Right Eye		Left Eye		Vision
Distance visual acuity	<input type="checkbox"/> PASS	<input type="checkbox"/> NON PASS	<input type="checkbox"/> PASS	<input type="checkbox"/> NON PASS	Ability to see objects far away
SureSight Vision Screener	<input type="checkbox"/> PASS	<input type="checkbox"/> NON PASS	<input type="checkbox"/> PASS	<input type="checkbox"/> NON PASS	Ability to see objects far away
Retinomoax Autorefractor	<input type="checkbox"/> PASS	<input type="checkbox"/> NON PASS	<input type="checkbox"/> PASS	<input type="checkbox"/> NON PASS	Ability to see objects far away
Stereopsis vision	Both Eyes <input type="checkbox"/> PASS <input type="checkbox"/> NON PASS				How well your child's eyes work together
Near visual acuity *Optional Test	Both Eyes <input type="checkbox"/> PASS <input type="checkbox"/> NON PASS				Ability to see objects up close
<input type="checkbox"/> UNABLE to be screened: Comments					

Results
☐ Your child **PASSED** the vision screening and nothing more needs to be done at this time. *(Remember, a vision screening does not detect all vision problems or diseases. A screening does not take the place of a comprehensive eye exam performed by an optometrist or ophthalmologist. If you still have questions or concerns, please seek the advice of an eye care professional.)*
☐ Your child **DID NOT PASS** vision screening. (See below for the steps that you need to follow to help your child). If color vision criteria was not met a color vision letter will be attached.

Referral Form
Please take this referral form and the eye care specialist report with you. It is important that the ophthalmologist or optometrist complete the Eye Specialist Report and that it is returned to the school. The recommendations can then be followed at school to benefit your child’s learning.

Find an eye doctor near you:
If you need help with locating an eye care specialist, paying for the examination and/or glasses (if prescribed), or have questions about your child’s vision screening, please contact me. If your child is already receiving eye care from a professional, please have the Eye Specialist report (Form I) completed by the Optometrist or Ophthalmologist and return to the school.

Screening (Contact Person)

Phone/FAX/email

Letter: C

[School Letterhead]
SAMPLE Notice to Parents on Color Vision

Date: _____

To: Parent(s)/Guardian of _____

Color Vision Letter

Dear Parent/Guardian,

The result of your child’s color vision screening indicate he/she may have difficulty discerning certain colors. Your child displayed some difficulty meeting criteria for color vision.

An eye exam may be beneficial to determine if your child has difficulty determining shades of colors.

During the early years of school, the use of colors with learning concepts in math and other subjects is sometimes a problem for children with vision color deficiency.

Accommodations for this can easily be made and schools are required to do so by federal law if there is a properly documented diagnosis.

Additionally, as your child gets older, informed decisions about career choices can be made when the exact nature and scope of the visual problem is known since some jobs require the ability to identify colors.

Screening (Contact Person)

Phone/FAX/email

Letter: D

[School Letterhead]
SAMPLE Follow-Up Referral Letter for Parents

School Vision Screening Referral Follow-Up

Date: _____

To: Parent(s)/Guardian of _____

Earlier in the school year a vision referral letter was sent home with an attached eye care specialist report form. At that time, due to the results from our school screening, it’s recommended that your child have a comprehensive eye examination. I have not received any information regarding this referral. Please check the appropriate statement listed below so I can record this information in your child’s health file.

- _____ The School Vision Screening referral letter and Eye Care Specialist report has been lost. Please send another one.
- _____ No appointment was made and we do not plan to follow up at this time.
- _____ Please send information on possible financial assistance for eye examinations and/or glasses.
- _____ An appointment is scheduled on_____ (date).
The Eye Specialist Report will be sent to the school upon completion.
- _____ The examination was done. I have notified the _____ (name of eye care specialist) and requested they send The Eye Specialist Report to the school.
- _____ Other _____

If you have any questions or need assistance in scheduling an appointment, please feel free to contact me.

Screening (Contact Person)

Phone/FAX/email

This area for office use only:

Received by: _____ Date: _____

Letter: E

[School Letterhead]
SAMPLE Screening Waiver Letter

School Vision Screening Monitoring Waiver

Date: _____

To: Parent(s)/Guardian of _____

Vision Screening Waiver

School Year: 20____ - ____

Child’s Name: _____

School: _____

I _____, the parent/legal guardian of

_____, request that he/she be exempt from the state mandated annual school vision screening/monitoring for the current school year. I understand that **this waiver to exclude my child needs to be renewed each school year** or my child’s vision may be screened/monitored as mandated by the Ohio Department of Health guidelines for school vision screenings. I understand by choosing to exempt my child from the district vision screening/monitoring, I cannot hold the district liable in any way for any undetected changes in vision/vision health or for any related services/accommodations that he/she may not receive due to any unidentified changes in vision/vision health. I further understand that should I wish to revoke this waiver during the present school year, it is my responsibility to provide a written and signed note to the school nurse at least two weeks prior to the school’s scheduled vision screening/monitoring.

Signature of Parent/Legal Guardian Date

Printed Name of Parent/Legal Guardian

This area for office use only:

Received by: _____ Date: _____

Form: A

Ohio Department of Health

Evaluation is a necessary component to all programs. The vision screening programs should incorporate evaluation into their ongoing efforts to increase follow up of failed screening results to improve the well-being of children in their program.

Evaluation Tool
1. What percentage of the required population was screened? (Goal = 100%)
2. Of those screened, what percentage was referred for an eye examination? (Goal = 5-10%)
3. Of those referred, what percentage of referrals were completed? (Goal = 100%)
4. If the percentage of children referred does not match the percentage of referrals completed, identify what the barriers to follow up there may be?
5. Of those identified barriers to follow up care what strategies should be implemented to increase follow up?
6. Utilization of ODH approved equipment as guidelines are revised it may be necessary to replace for preschool and for school age approved equipment.

Form: B

School Observations Form Checklist [School Letterhead]

School Vision Screening Information Letter

Date: _____ Observed by Parent(s)/Guardian(s) of _____ or

Screener _____

- Note any of the following eye condition.
 - ☐ Ocular asymmetry, including eye size.
 - ☐ Abnormal color of iris, shape of pupils, etc.
 - ☐ Red, swollen eyelids.
 - ☐ Drooping eyelid(s).
 - ☐ Growth on lid or eye.
 - ☐ Drainage or discharge from the eyes.
 - ☐ Consistently crusty eyelashes.
 - ☐ Unequal pupil size.
 - ☐ Cloudiness or haziness of cornea.
 - ☐ Red eye or eyes.
 - ☐ Misaligned eyes (ocular muscle imbalance).
 - ☐ Eyes in constant motion, i.e., nystagmus.
 - ☐ Consistently poorly fitting frames or scratched corrective lenses.

Referrals can be made on frequent behaviors observed by a teacher, parent/guardian or screener nurse.

- Note the following behaviors.
 - ☐ Holding working material excessively close or far from the eyes.
 - ☐ Squinting.
 - ☐ Frequent rubbing or blinking of eyes.
 - ☐ Frowning when reading.
 - ☐ Thrusting head forward.
 - ☐ Constant head tilt or face turn/any unusual head position.
 - ☐ Covering an eye while reading.
 - ☐ Closing one eye in sunlight.

In addition to appearance and frequent behaviors observed, referrals can be made based on complaints from the child.

- The following list of questions is appropriate in working with the child to obtain a history of complaints:
 - ☐ Do you have or wear glasses?
 - ☐ Do you have difficulty seeing distance (such as when looking across the street) or at a close distance (such as when reading a book)?
 - ☐ Do you have blurred or double vision when reading or doing close work?
 - ☐ Do you get frequent headaches when reading or doing close work?
 - ☐ Do your eyes feel tired when reading or doing close work?
 - ☐ Do you have blurred vision when going from distance work to near work or near work to distance work?
- Note the following complaints might come from the child, parent or guardian.
 - ☐ Eye pain.
 - ☐ Itching and/or burning sensation.
 - ☐ Double vision.
 - ☐ Blurred vision.
 - ☐ Frequent headaches when reading,
 - ☐ Persistent visual complaints after reading or any sustained near activity.
 - ☐ Light sensitivity:
 - ☐ Spots floating across field of vision.

Form: C

Form C: Preschool Vision Screening Form for 3 Year Olds
CROWDED SINGLE LEA SYMBOLS VISION SCREENING TEST (5 FT)

Name: _____ Age: _____ Date: _____

Pretest – both eyes

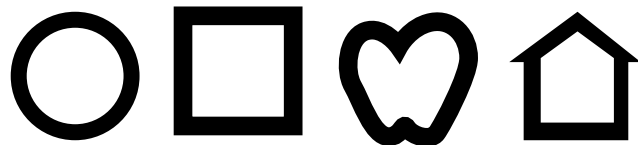
Lap card



Identify ALL symbols?
☐ Yes ☐ No

Right Eye

Baseline
Flipbook
Right Eye



Identify at least 3 of 4 symbols?
☐ Yes ☐ No

3 Year Olds
Disk
Right Eye



Identify at least 3 of 4 symbols?
☐ Yes ☐ No

3 Year Olds
Disk
Right Eye



Identify at least 3 of 4 symbols?
☐ Yes ☐ No

Left Eye

Baseline
Flipbook
Left Eye



Identify at least 3 of 4 symbols?
☐ Yes ☐ No

3 Year Olds
Disk
Left Eye



Identify at least 3 of 4 symbols?
☐ Yes ☐ No

3Year Olds
Disk
Left Eye



Identify at least 3 of 4 symbols?
☐ Yes ☐ No

Results per SECTION (Pretest, Right Eye, Left Eye): All boxes YES = PASS. Any NO in any box = Non Pass.

Overall ☐ Pass ☐ Non Pass

HEA #0135

Form: D

Preschool Vision Screening Form for 4-5 Year Olds
(Also, kindergarteners and first grades)
CROWDED SINGLE LEA SYMBOLS VISION SCREENING TEST (5 FT)

Name: _____ Age: _____ Date: _____

Pretest – both eyes

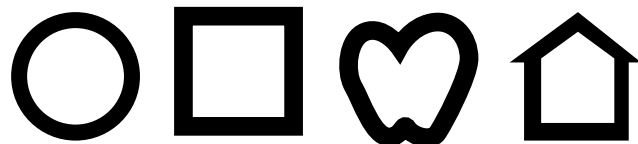
Lap card



Identify ALL symbols?
☐ Yes ☐ No

Right Eye

Baseline
Flipbook
Right Eye



Identify at least 3 of 4 symbols?
☐ Yes ☐ No

4 & 5 Year Olds
Disk
Right Eye



Identify at least 3 of 4 symbols?
☐ Yes ☐ No

4 & 5 Year Olds
Disk
Right Eye



Identify at least 3 of 4 symbols?
☐ Yes ☐ No

Left Eye

Baseline
Flipbook
Left Eye



Identify at least 3 of 4 symbols?
☐ Yes ☐ No

4 & 5 Year Olds
Disk
Left Eye



Identify at least 3 of 4 symbols?
☐ Yes ☐ No

4 & 5Year Olds
Disk
Left Eye



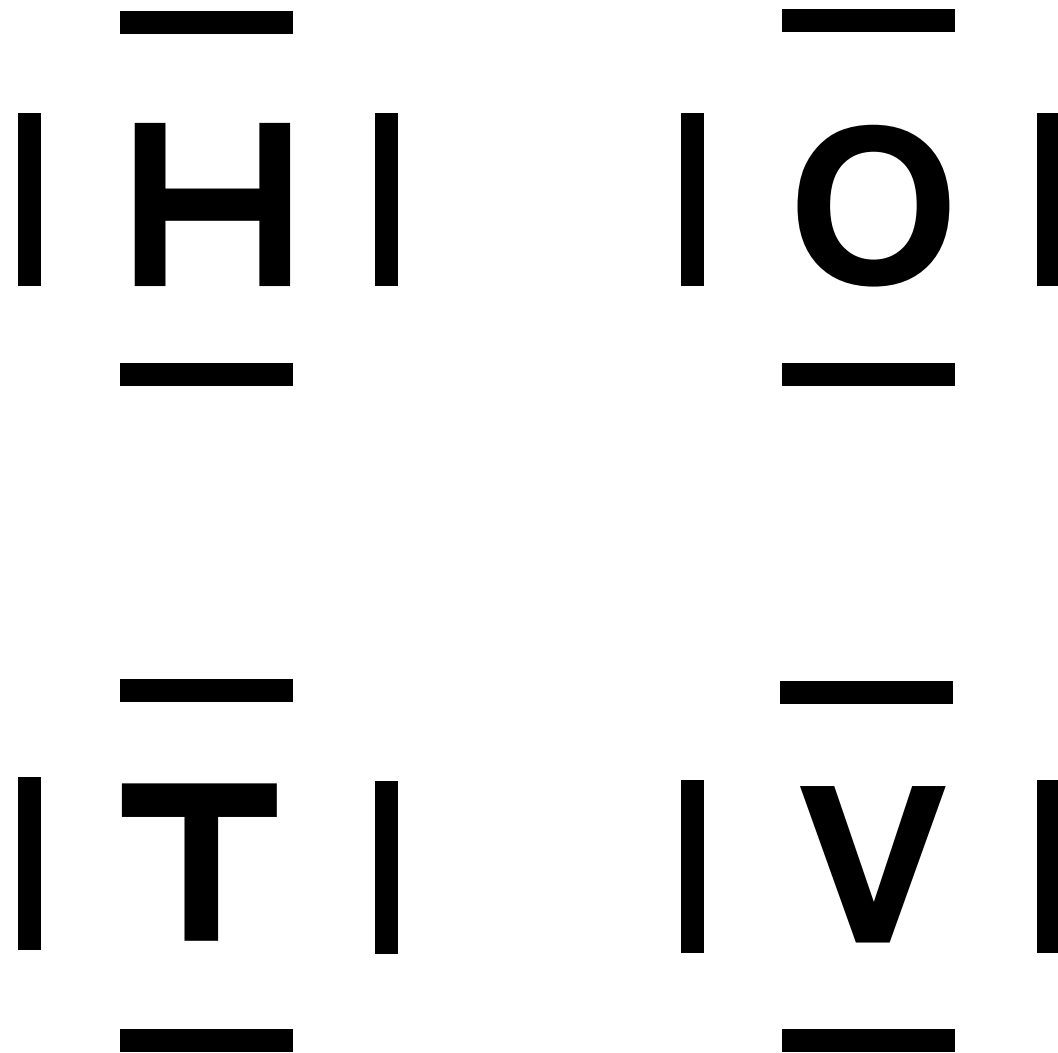
Identify at least 3 of 4 symbols?
☐ Yes ☐ No

Results per SECTION (Pretest, Right Eye, Left Eye): All boxes YES = PASS. Any NO in any box = Non Pass.

Overall ☐ Pass ☐ Non Pass

HEA #0139

HOTV Matching Cards



Preschool Students Vision Screening Record

[illegible]

Form: G

Preschool Students Follow Up Vision Screening Record

The names of children referred for an eye examination should be listed. A check should be placed in the appropriate column under follow-up results when follow-up is completed. The record is designed to assist local agencies in evaluating their vision programs and in organizing information for annual reports for the Ohio Department of Health's system of data collection.

[illegible]

*= LEA Symbols, JVAS and EYE Check at 5 feet indicate Pass (P) or Non Pass (NP)

HEA #0139

Form: H School Age Vision Screening Record

Vision Screening Record

[illegible]

* = LEA Symbols, JVAS at 5 feet indicate Pass (P) or Non Pass (NP)

HEA #0140

Form: I

School-Age Vision Student Follow Up Vision Screening Record

The names of children referred for an eye examination should be listed. A check should be placed in the appropriate column under follow-up results when follow-up is completed. The record is designed to assist local agencies in evaluating their vision programs and in organizing information for annual reports for the Ohio Department of Health's system of data collection.

[illegible]

*= LEA Symbols, JVAS at 5 feet indicate Pass (P) or Non Pass (NP)

Form: J

Eye Specialist Report

(* Return completed report to school health clinic or nurse)

School Screening Information

Child's Name: Date of Birth: Date of Referral:
School: Grade:
Reason for Referral (Test failed or type of symptoms): <input type="checkbox"/> With glasses <input type="checkbox"/> Without glasses <input type="checkbox"/> Failed Observation <input type="checkbox"/> Failed Distance Visual Acuity: <input type="checkbox"/> R <input type="checkbox"/> L <input type="checkbox"/> Failed Stereopsis <input type="checkbox"/> Unable to screen Circle option selected (Sloan Chart, LEA Symbols Chart 5 or 10 feet, JAEB Screener JVAS) (PASS 2 or Random Dot E)
Electronic Screening: without glasses (WA SureSight® / Retinomax) With glasses (WA SureSight® / Retinomax) R_____ L_____ R_____ L_____

Eye Specialist Findings

Data of Exam: _____	without correction	with current prescription	with new prescription
[] Normal	R _____ L _____	R _____ L _____	R _____ L _____

Summary of vision problem & diagnosis

[] Hyperopia: Indicate eye? _____

[] Myopia: Indicate eye? _____

[] Amblyopia: Indicate eye? _____

[] Strabismus: Indicate eye? _____

[] Esotropia: Indicate eye? _____

[] Astigmatism: Indicate eye? _____

[] Exotropia: Indicate eye? _____

[] Other: Explain _____

Recommendations & Treatment

Glasses Prescribed: [] No [] Yes ➡ [] Constant Wear [] Near vision only [] Far vision only [] May remove for physical education

[] Medical /surgical treatment (e.g., patching, Atropine drops, etc.): _____

[] Contact Lenses _____

Additional instructions for Teachers

Upon completion of any needed eye care treatment, I expect there will be:

[] No significant visual problem that may interfere with learning.

[] Visual problem that may interfere with learning. Explain (see blow): _____

* [] Preferential seating needed [] Visual aids [] Magnifiers [] Assistive technology [] Lighting conditions [] Other: _____

Is further treatment necessary? [] No [] Yes If yes, specify _____

Do you wish to see this child again? [] No [] Yes If yes, specify _____

Consent of Parent or Guardian

I agree to release the above information on my child or ward to appropriate school or health authorities.

Parent or Guardian Signature Date

Send completed report by medical professional to:
(Place school name, address, fax #, etc. here.)

Eye Specialist Signature Date

Address

City State Zip

Phone Number

This form is intended for the sole use of the intended recipient and may contain privileged, sensitive, or protected health information. If you are not the intended recipient, be advised that the unauthorized use, disclosure, copying, distribution or action taken reliance on the contents of this communication is prohibited.

Pediatric Reporting Form

Form to be Completed by Healthcare Provider

Name: School Year:

I authorize my child’s physician to release this completed form to _____. Please fax to _____, Attention: _____. I understand that the requestor will protect this information as prescribed by the Family Educational Rights and Privacy Act (FERPA) and the Health Privacy Act (including HIPPA).

Parent/Guardian Signature _____ Date _____

Childs’ Name _____ Date of Birth _____

Pure Tone Hearing Screening Results

	1000	2000	4000	Observation/Comments:
R	Pass_____ (20 dB)	Pass_____ (20 dB)	Pass_____ (20 dB)	
	Non Pass_____	Non Pass_____	Non Pass_____	
L	Pass_____ (20 dB)	Pass_____ (20 dB)	Pass_____ (20 dB)	
	Non Pass_____	Non Pass_____	Non Pass_____	

EVALUATION RESULTS:

Diagnosis: _____
Treatment Plan: _____
Comments: _____

Vision Screening Results

Acuity Test:	Uncorrected:	Corrected:	Indicate Type by placing a : “X”	Electronic Screener (circle one):	Observation/ Comments:
R	Pass:	Pass:	_____ Lea 5 ft. _____ Lea 10 ft. _____ Eye Check _____ Sloan Chart 10 ft	Suresight/Retinomax/JVAS	
	Non Pass_____	Non Pass_____			
L	Pass:	Pass:	_____ Lea 5 ft. _____ Lea 10 ft. _____ Eye Check _____ Sloan Chart 10 ft	Suresight/Retinomax/JVAS	
	Non Pass_____	Non Pass_____			
Stereopsis	Pass	Fail	_____ Smile (PASS 2) _____ Random Dot E		
Color Vision (Male Only)	Pass	Non Pass	_____ Ishihara - 14 plate _____ Pseudoisochromatic color testing - 16 plate _____ Color Vision Testing Made Easy		

EVALUATION RESULTS:

Diagnosis: _____
Treatment Plan: _____
Comments: _____

Signature of examining Healthcare Provider: _____
Address: _____
Phone: _____

Date of exam: _____

Screening Results Documentation Form

The Survey Monkey can be found online at Link <https://www.surveymonkey.com/r/visionreport>

This form is included in the guidelines to inform agencies who are required to submit the general questions the survey will ask. The survey will add more or less questions as ODH finds it necessary to adjust the questions.

Screening Facility Name_____

Address_____

Id #_____

Person conducted screenings_____

Person submitted referrals_____

Grades	Screened	Rescreened	Referred	Follow Up	Equipment Used
Preschool					
Kindergarten					
First grade					
Third grade					
Fifth grade					
Seventh grade					
Ninth Grade					
Eleventh grade					

* Additional reporting is required for new students, transfer students and/or students screened in ODH pre-approved substitute grades.

Dictionary

Grades- The required reporting grade are Preschool, kindergarten, first grade, third grade, fifth grade, seventh grade, ninth grade and eleventh grade.

Screened- Children screened at initial screening.

Rescreened- Children who completed a secondary screening.

Referred- Children who were referred to be seen by an Ophthalmologist or Optometrist.

Follow Up -The Eye Specialist Report (Form J) is returned to the school completed.

Equipment Used- Be prepared to select the equipment which was utilized in each grade screened.

References

1. American Academy of Pediatrics. Vision. In: Tanski S, Garfunkel LC, Duncan PM, Weitzman M, eds. *Performing Preventive Services: A Bright Futures Handbook*. American Academy of Pediatrics; 2010
2. National Center for Children’s Vision and Eye Health, Prevent Blindness, A Snapshot of Current National Issues.
3. Dobson, V., Harvey, E. M., Miller, J. M., & Clifford-Donaldson, C. E. (2008). Anisometropia Prevalence in a Highly Astigmatic School-Aged Population. *Optometry and Vision Science: Official Publication of the American Academy of Optometry*, 85(7), 512–519. <http://doi.org/10.1097/OPX.0b013e31817c930b>
4. Ying, G., Maguire, M. G., Cyert, L. A., Ciner, E., Quinn, G. E., Kulp, M. T., ... Moore, B. (2014). Prevalence of Vision Disorders by Racial and Ethnic Group among Children Participating in Head Start. *Ophthalmology*, 121(3), 630–636. <http://doi.org/10.1016/j.ophtha.2013.09.036>
5. Varma R, Tarczy-Hornoch K, Jiang X. Visual Impairment in Preschool Children in the United States Demographic and Geographic Variations From 2015 to 2060. *JAMA Ophthalmology*. Published online May 04, 2017. doi:10.1001/jamaophthalmol.2017.1021
6. US Preventive Services Task Force. Vision Screening for Children 1 to 5 Years of Age: US Preventive Services Task Force Recommendation Statement. *Pediatrics*. 2011;127:340-346. Available at: <http://www.uspreventiveservicestaskforce.org/uspstf11/vischild/vischildrs.htm>. Accessed April 25, 2017.
7. Kemper A, Delmonte M. Vision. In: Tanski S, Garfunkel L, Duncan P, Weitzman M eds. *Performing Preventive Services: A Bright Futures Handbook*. American Academy of Pediatrics;2010:155-157. Available at: <http://brightfutures.aap.org/pdfs/Preventive%20Services%20PDFs/Screening.PDF>. Accessed January 2011.

Notes



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