



**DISTRICT 33K  
LIONS EYEMOBILE  
KIDSIGHT TRAINING  
MANUAL**

## **Why is screening of preschool children important?**

Approximately 4% of all children will develop amblyopia, a treatable disorder that can result in permanently reduced vision when not addressed by an early age. The Eyemobile screening device detects risk factors for amblyopia, such as strabismus (eyes that cross or wander out), refractive errors and unequal vision between the eyes, and even more potentially serious issues like cataracts and eye cancer. Unless the risk factors for amblyopia are detected and corrected early, they risk becoming permanent by age 7. In addition to amblyopia, detecting other potential vision problems in the early school years may contribute to better academic performance. Up to 15% of children screened are referred for further professional evaluation. According to educational experts, 80% of learning is visual. Yet young children in Massachusetts usually don't get their vision screened until they enter school when visual screenings are required by law.

## **Know and understand Amblyopia risk factors**

The National Eye Institute defines amblyopia as follows: "Amblyopia is the medical term used when the vision of one eye is reduced because it fails to work properly with the brain. The eye itself looks normal, but for various reasons the brain favors the other eye. This condition is also sometimes called lazy eye."

2-3% of the population has risk factors for amblyopia. The lay person term for amblyopia is "lazy eye." It is caused by any condition which causes one eye to not see as well as the other. The brain learns to see out of the better eye and ignores the weaker eye. This can be caused by one eye having a much higher glasses prescription than the other (anisometropia), strabismus or, in rare cases, juvenile cataract.

If the risk factors for the development of amblyopia are not detected and treated by age six, the chances of successful treatment greatly diminish. Treatment may include, but is not limited to, correcting the refractive error with glasses, patching, blurring one eye with an eye drop, vision exercises or surgery. Beyond the age of seven, treatment success is limited but is usually attempted.

## **How to reach out to schools and agencies to offer screening services**

Lions should reach out to community agencies that work with children to help organize a vision screening:

Local Head Start programs

- Kindergartens
- Nursery schools
- Religious schools
- Daycare centers
- Other organized children's programs with a chief administrator

Speak with the administrator about the needs and benefits of doing children's vision screenings – especially for ages 6 months to 6 years. Offer your club's services in conducting these screenings, explaining that the methods used are scientifically validated by professional third parties. Once the agency agrees, schedule a time to do the screening. Invite the chief administrator to be present at the screening.

If an agency needs more information, refer personnel to the National Institutes of Health, American Academy of Optometry, American Academy of Ophthalmology and American Academy of Pediatrics, which have all published peer reviewed papers in support of children's vision screening. Links to these papers are

on the Lions KidSight USA website at [www.KidSight.com](http://www.KidSight.com).

## **Parental Consent**

Parental or guardian consent is mandatory before any child is screened. A parent or guardian must sign a consent form allowing their child to be screened. The consent form must protect the privacy of the screened children in accordance with The Health Insurance Portability and Accountability Act (HIPAA).

This form should include the following statements:

- Vision screenings are intended to uncover conditions that might affect eyesight. They do not constitute a medical diagnosis.
- The screening is not a substitute for a comprehensive eye examination by a medical professional.
- A parent/guardian who feels their child has a vision problem should have the child examined by a medical professional regardless of the results of the screening.
- Not all vision problems are detected by the vision screening process.
- Less than 5% of children cannot be screened due to the incompatibility between child and equipment.
- Results of the screenings will be provided.
- An “opt out” check box next to a statement allowing authorized screening personnel to contact the parent(s)/guardian regarding the child’s results. If the “opt out” box is checked, no contact can be made.
- All information will be kept confidential and will not be made public without the parent(s)/guardian written consent

The Consent Form #CF-1 available from the Eyemobile meets these requirements. You are strongly urged to use it in lieu of your own. A copy is available in the appendix.

## **Criminal Offender Record Information Law (CORI)**

In Massachusetts children are protected by CORI regulations. Lions that screen children are not bound by these regulations providing:

- A child is not left unattended in the presence of the screener.
- A parent, guardian, or other person that has passed the criminal background check required by CORI is present at all times during the screening.
- School personnel have all passed CORI requirements.

It’s imperative that these guidelines are followed unless the screener has been certified by CORI for the specific screening being conducted

## **Equipment used in screenings**

You will be using a Welsh Allyn Spot Screener, HP printer, and a wireless router; programed to function together as an integral unit providing a wireless system.

- The Spot Screener is a portable unit that requires charging before use.
- The printer and router require 120 VAC service.
- Do not change any settings.
- You may need to replenish disposable supplies such as copy paper.

User manuals are included with the equipment or can be found on the manufacturer’s web page.

## **REPORTS**

A printed report should be made available to the parents/guardians of children that fail the screening. If they are not present during the screening assure that a copy will be given to the parents by the screening school or agency. Providing a printed report to children who pass is optional.

## **Understanding of the proper environment for accurate screening**

Here are some tips that can help you conduct a successful screening:

- The vision screening should be done in a room or location with controllable light (so the brightness can be adjusted) and without direct light shining into the screening device.
- DO NOT screen children in a small dark room.
- It is always best to have one of the agency’s staff present during the entire screening process.
- One Lion should be assigned to operate the screener and, if necessary, the printer (for screening results).
- At the minimum, there should be one Lion assigned to organize the waiting line and collect the demographic information on the child screened. Another Lion should help children get into the proper place in front of the camera when it’s their turn to be screened. Agency staff may be a great help in this process.

Be completely knowledgeable about the operation of your screening device, a Welch Allyn Spot. This machine will produce excellent, scientifically validated results. You should completely familiarize yourself with how your machine should be used so you will always perform accurate screenings. Welch Allyn Spot have excellent training material which can be found on the Lions KidSight USA website. Please study this information and practice with your camera so you will be totally proficient on “screening day.”

## **How to interact with children safely and effectively**

Here are some tips to keep in mind when screening:

- Make it “FUN.”
- Never be alone in a room or confined space with a child.
- Have a teacher, school nurse, or teacher’s aide help line the children up and keep them occupied until it’s their turn.
- Try not to have the waiting children interact with the child being tested.
- Don’t have too many children lined up at one time.
- Smile at the children all the time.

- Do not show frustration if a child is not cooperating. Retest on another day if necessary.
- Always tell the children they “did a great job.”
- Do not touch children. If they need direction in standing/sitting in the proper location or prompts such as a touch on the shoulder, have the school personnel do this. Do not do this yourself.
- Give clear instructions as to where the child should look. Again, make it a game. When the screening results are obtained, tell the child, “You win!”

## **Making adjustments to improve the screening process**

Here are some tips for adjusting the screening process to improve your results:

- Be sure the child’s pupils are at least 4mm but not more than 8mm. If necessary, adjust the light brighter to achieve smaller pupils or darker to achieve larger pupils.
- Consider using a black umbrella or even sunglasses on those children with small pupils when you cannot dim the lights.
- Be sure there are no direct lights shining on the front of the camera.
- Be sure the camera is level and squarely pointed at the child’s eyes at exactly the same height of the eyes. If the camera is tilted up or down, or twisted right to left, it will be difficult to obtain a good reading.
- Be sure neither you nor the child moves during the camera’s reading process. Both you and the child need to be still for just 1 second, but both of you must be still.
- Be sure the front of the camera is about 3 feet from the child’s eyes when conducting the screening.
- If the distance changes due to movement, slowly rock forward or backward to achieve the correct distance. It sometimes helps to place paper “foot prints” on the floor where you want the child to stand. Or consider having the child sit in a chair. Remember, you must hold the camera at the height of the child’s eyes – do not point it down to them.
- The Welsh Allyn Spot has flashing, colored lights. Make sure the child looks at the lights.
- Properly answer questions from parents, teachers, etc. about the screening results without diagnosing
- Here are some tips for addressing technical questions during a screening:
- When you are asked why a child needs to be referred, you cannot diagnose since you are not a doctor with a license to practice. The only thing you may say is that based on the national standards built into the machine, the child needs to see an eye doctor for a complete evaluation. Do not enter into a debate on the merits of the screening.
- You may describe the national averages for specificity for which the camera is set.

Without indicating why a particular child failed the screening, you may discuss the various conditions the camera detects and why they are important – again, DO NOT indicate why a child needs referral. This is diagnosing.

## **Have in place a system to efficiently accomplish follow up**

It is extremely important to follow up with the parent/guardian to ensure that children who are referred get the professional care they need. This is generally accomplished by a phone call to the family. It is also

generally accepted in the public health community that no more than 3 phone calls to a parent/guardian are made. The administrative decision becomes who will be responsible to make these calls.

The simplest model is to have the administrator/school nurse of the agency be responsible for ensuring proper follow up. The agency, after all, is responsible for the well-being of its children, so asking them to do the phone calls is not unreasonable. The Lions club can then call this administrator 4-8 weeks later to confirm the number of children who received professional care after the screening.

Another model would be for a Lion or volunteer from the club to agree to make the calls. This puts a small burden on the club. However, since a “normal” referral rate is less than 10% of those screened, it represents only 10 contacts needed out of each 100 screenings completed. The club or zone could have a volunteer “Follow up Committee” that is assigned with following up and keeping the records of the phone calls.

## **You should set up a network of doctors to examine those who are referred**

The children who need referrals are going to need to be examined by an eye doctor. It is considered best practice to visit the doctors’ offices (appointments are best) to discuss the screening process and the work you are doing. Explain the results and show them the screening report forms the instruments generate. Assure the doctors that the patients will be free to choose any doctor they wish to go to. It is also good to invite doctors to attend a screening, and you should be available for any questions they may have. The examining doctors should commit to following the national standards for pediatric eye exams, which include using Cycloplegic Drops to dilate the pupils to allow true comprehensive examination.

If your club is prepared to assist with financing comprehensive examinations and/or glasses, arrangements should be made with the doctors in your area and the agency for which you are screening should be informed of this possibility. It is strongly suggested that a one-to-one relationship with a particular provider be avoided. A list of local providers is preferable. If a club is planning to offer financial assistance, predetermined criteria for this assistance should be clearly written and followed.

## **Maintain accurate data on the screenings you do**

The club should record the global data. This should include the number screened and number referred, age of the children, the number of those who were referred who actually received professional care and the diagnosis if at all possible. Remember, names should not be attached to this data. It is just the raw data that will be important.

Eventually, Lions KidSight USA will have a national database in which we will collect all the screening results from around the nation.

## **Public Relations**

Consider developing a community press release about your Lions KidSight USA screening projects to share your screening project with the community. You can include the number of children screened and referral rates, but you cannot mention children’s names or any personal information collected at the screening due to privacy issues.

Consider talking to the school about the possibility of inviting a parent whose child was referred for professional care to assist the school in developing a press release discussing improvements they observed in their child as a result of the treatment. While this news story might take place several months after the screening, it will encourage more parents to allow their children to be screened in the coming year.

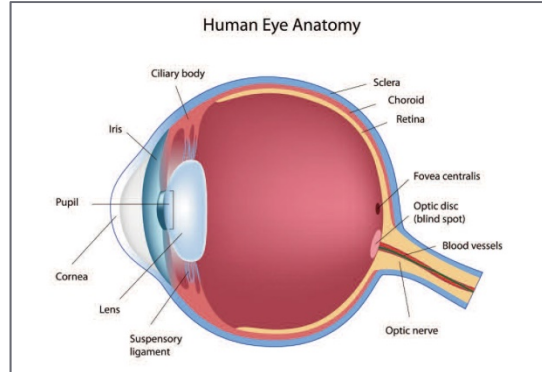
*Some material has been compiled from <http://e-district.org/userfiles/553/file/LionsKidSightUSATrainingManual.pdf>*

# APPENDIX



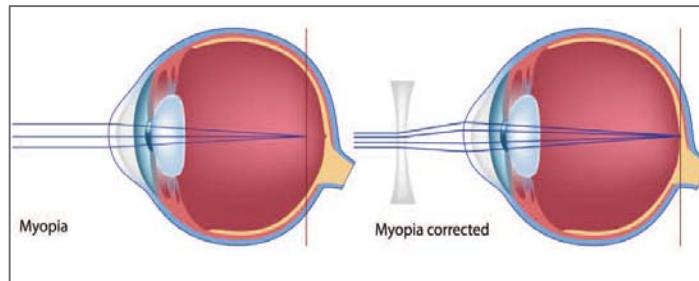
# Definitions of medical terms associated with vision screening

## Diagram of Human Eye



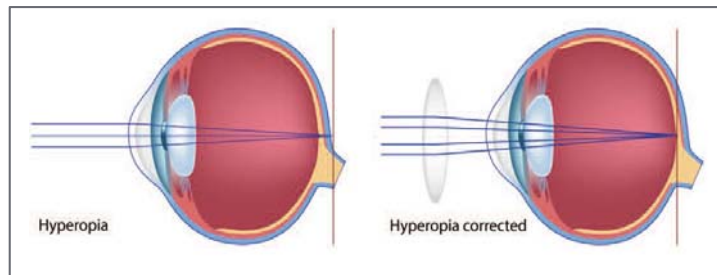
### Myopia (Near Sighted)

The eye is too powerful for its length. Light is focused to a point in front of the retina. This creates the symptom of seeing poorly at distance and more clearly when near. The higher the myopia the closer things need to be to appear clear.



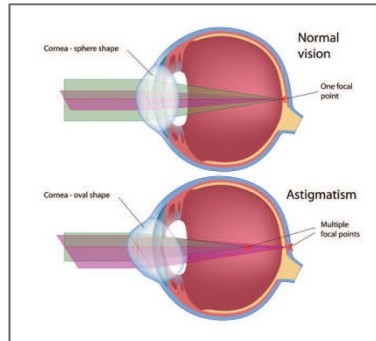
### Hyperopia (Far Sighted)

The eye is not powerful enough for its length. Light is focused to a point behind the retina. The child may be able to refocus the eye to compensate for the hyperopia, but this causes the eyes to work to see at any distance (but may still have good 20/20 vision). If hyperopia is high, it may cause the eyes to cross. This is one of the major risk factors for amblyopia. Older children with significant amounts of hyperopia may experience tired eyes and difficulty maintaining focus and concentration when doing detailed visual tasks.



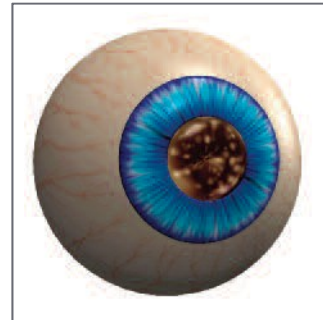
## Astigmatism

The eye has two focus points rather than the usual one. Points may be either myopic, hyperopic or any combination of the two. The amount of astigmatism is defined by the spread between the focus points. Since there isn't a single point of light to be resolved on the retina, vision will not be perfectly clear at any distance. The child may attempt to achieve the best possible vision by refocusing the eye to compensate for the astigmatism. Just like in hyperopia, children will experience tired eyes and difficulty maintaining focus and concentration when doing detailed tasks.



## Cataract

When the lens in the eye is cloudy, reducing the light entering the eye and distorting the image.

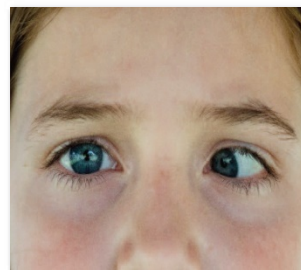


## Anisometropia

A significant difference between the refractive powers (eyeglass prescription) of the eyes. The brain will choose to see out of the eye with the least refractive error and ignore the other eye. If not treated early, the eye that is ignored will experience poor vision throughout life.

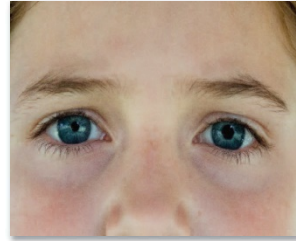
## Strabismus

Misaligned eyes. One eye turns in, out, up or down. The other eye points properly



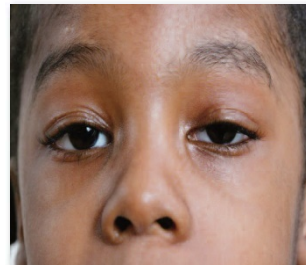
### **Anisocoria**

Unequal pupil size more than 0.4 mm. About 20% of the normal population has this, but it could indicate serious neurologic problems, especially with 1 mm or more of difference.



### **Ptosis**

Lid droop. Usually one lid droops significantly lower than the other. May indicate serious neurologic problems. May have significant systemic implications.





# CONSENT FORM VISUAL SCREENING PROGRAM

I give permission for the below named child to participate in the free vision screening program that will be conducted at \_\_\_\_\_ on \_\_\_\_\_.

I have read and understand the following:

- Visual screenings are intended to uncover conditions that might affect eyesight. They do not constitute a medical diagnosis and are not a replacement for an eye exam by a medical professional. Not all vision problems are detected by the vision screening process.
- I understand that over 95% are successfully screened and that a few cannot be screened due to incompatibility between child and equipment.
- I will be provided with the results of the screenings.
- If the screenings indicate any possible vision problems, I am responsible for any follow up with a medical professional.
- All information will be kept confidential and will not be made available to any third parties without my written consent.

\_\_\_\_\_  
*Print name of parent or legal guardian*

\_\_\_\_\_  
Date:

\_\_\_\_\_  
*Sign name of parent or legal guardian*

\_\_\_\_\_  
*Preferred contact information if required, e.g. phone, email, other*

Child's Full Name: \_\_\_\_\_

Male  Female  First Middle Last Initials \_\_\_\_\_ Child wears glasses: No  Yes

Child's Date of Birth \_\_\_\_\_ Child s' Age \_\_\_\_\_

You may contact me after the screening regarding my child's results: No  Yes

## ***For office use:***

Child screened on: \_\_\_\_\_

Passed:  Failed:  Unable to screen:

Form #CF-1

## **Sample Introductory Letter**



# HOLLISTON LIONS kidSight PROGRAM

Lions KidSight USA is a nationwide program to safeguard the vision of preschool children through free vision screenings. Studies have shown that up to 15% of preschool children screened are referred for a follow up exam with an eye care professional and up to 4% of preschool children have a treatable disorder that can result in permanently reduced vision if not addressed by an early age.

The Holliston Lions Club has adopted kidSight and is partnering with local groups to provide free screenings which include:

- Hyperopia – Difficulty seeing objects that are near, far sighted.
- Myopia – Distant objects appear blurred, near sighted.
- Astigmatism - A condition in which the cornea has an abnormal curve causing out-of-focus vision.
- Anisometropia –A condition where one eye has poorer vision than the other.
- Strabismus – A condition where the eyes point in different directions.
- Anisocoria – A condition where the pupils are not the same size.

Screenings are done with camera type equipment. Nothing touches the child. All the child has to do is look into the camera from a distance of about three feet. A report is provided to parents/guardians that do not pass. A small number of children are not able to be screened due to incompatibility between child and equipment.

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

Our mission is to ensure free eye screenings are available to all kids because every child deserves to learn and see the world clearly. Are you or your organization interested in partnering with the Holliston Lions?

Visit [www.KidSightUSA.org](http://www.KidSightUSA.org) for more information

or contact

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***The KidSightUSA program is  
made possible to Lion Clubs  
through District 33K Lions  
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**[www.33KEyemobile.org](http://www.33KEyemobile.org)**



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