

# Hawaii Lions District 50 Vision Screening Handbook

Prepared by  
D50 Vision Screening Steering Committee

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## Introduction

### D50 Vision Screening Steering Committee

- ◇ Berta Jenkins, Chairman, D50 Sight Committee
- ◇ Steve Onoue, Sub-committee Chairman, Vision Screening, Oahu
- ◇ Phil Sharp, Sub-committee Chairman, Vision Screening, Oahu
- ◇ Alice Kudo, Sub-committee Chairman, Lions in Sight
- ◇ Brian Akimoto, Sub-committee, Chairman, Amblyopia
- ◇ Cynthia Chun
- ◇ Dr. Roger Ede
- ◇ Sam Fisk
- ◇ Bud Jenkins
- ◇ Gail Kono
- ◇ Paul Kudo
- ◇ Frank Nakamoto
- ◇ Al Sasaki
- ◇ May Thomas

The District 50 Hawaii Lions are comprised of over 1600 men and women in 60 Clubs throughout the State. Hawaii Lions have been providing free hearing and vision screenings at elementary schools throughout Hawaii since 1995, when the State Department of Health's annual screenings were discontinued for lack of funding.

The free screenings are conducted on the islands of Kauai, Oahu, Molokai, Maui, Lanai, and Hawaii, by trained Lion volunteers providing a standardized, systematic program based on current best practices for elementary students in the State of Hawaii. Both the Lions Screening Programs (hearing and vision screening) have been upgraded with state-of-the-art instruments providing improved screenings in a fraction of the time that it took in the past. Only students who have parent consent are screened.

For those students who are referred for further attention to vision or hearing needs, and whose families are under-insured or uninsured, the Hawaii Lions Foundation (HLF) has the Helping Children See (HCS) Program. For those eligible, the HLF through the HCS program, is able to supplement the cost for an eye exam and a pair of glasses.

The Helping Children See Program (HCS) is funded by the Hawaii Lions Foundation specifically to purchase eye examinations and eyeglass for needy children identified through a Lions Vision Screening Program. HCS enables parents to better prepare their child for success in school. Uncorrected vision can severely impact a child's ability to learn. The inability to benefit from classroom instruction can have life altering consequences. The Lions of Hawaii have had a long and proud history of Vision Screening. With HCS we can now close the circle by offering not only vision screening but also a referral to a professional eye care provider and ultimately fulfillment by providing glasses for those children who are under insured or not insured at all.

## Program Goal

The goal of the statewide Lions screening program (hearing and vision), is to identify students most likely to have vision or hearing impairment that may affect their academic, social or personal development. The focus is on early detection, screening children who are in preschool and in grades K, 1, 3, 5. Many of the Lions clubs have responded to requests for whole-school screenings.

- b. [Critical Line Quickie Guidelines](#)
- 7. [Training on Photoscreener/autorefractors](#)
- 8. References
  - a. [Eye Care Providers](#)
  - b. Acronyms, Terms and Definitions (to be developed)
  - c. [Recommended Vision Screening Protocols for D50](#)

## List of Attachments

The following documents supplement the vision screening handbook. They may be viewed and/or downloaded by clicking on the document links.

1. Vision Screening Introduction Kit for School
  - a. [Hawaii D50 Vision Screening Project Responsibilities](#)
  - b. [School's Preparations for a Vision Screening](#)
  - c. [School Participation Information](#)
  - d. [Introduction to the Photoscreener/Autorefractor](#)
  - e. [What the School May Expect at a Vision Screening](#)
  - f. [Parent/Teacher ABC Checklist](#)
2. Reserved
3. Documentation
  - a. [Calendar Request Form 2019-2020.xlsx](#)
  - b. [Calendar Request Form 2019-2020 Neighbor Islands.xlsx](#)
  - c. [Parent Consent and Screening Results Form](#)
  - d. [Vision Screening Statistics Table](#)
4. PlusOptix S12 Vision Screener
  - a. [User Manual \(S12\)](#)
  - b. [Troubleshooting Error Messages](#)
  - c. [Cheat Sheet \(S12 operation\)](#)
5. Welch Allyn Spot Vision Screener
  - a. [User Manual \(Spot\)](#)
  - b. [Spot Vision Screener Quick Start Guide \(Troubleshooting included\)](#)
  - c. [Cheat Sheet \(Spot operation\)](#)
6. Distance Visual Acuity Testing
  - a. [Distance Visual Acuity Test Procedures](#)

## Acknowledgements

Since the inception of the D50 Vision Screening Program, there have been many key Lions and Lions Clubs who have contributed to the success of the Program. Too numerous to list and in an effort to avoid offending anyone who may be forgotten, an appreciation is extended to all who have made those contributions and continue to make contributions to the success of the vision screening of pre-school and elementary school children in the State of Hawaii. Thank you all for your contribution to the success of the many students you have screened!

## Procedures

The 2019 – 2020 District 50 Lions Vision Screening Protocol is modeled after the state of Washington and uses the current 'best practices' vision screening tools for preschool and elementary school age children. Our Lions Sight Program's Steering Committee ***annually reviews*** various states Vision Screening Programs, new Instruments and technologies to adhere, modify and adopt our current, evidenced based, 'best practice' model.

The procedures are described in 3 phases.

- Pre-Screening
- Screening
- Post-Screening

## Pre-Screening Phase

The Lions club screening coordinator's (hereafter referred to as coordinator) first step is to contact the school principal or preschool director to schedule a date and time for the screening. It is highly recommended that the initial contact with the school be in person.

- A. At the initial meeting, the coordinator will:
- Introduce him/herself.
  - Describe the club's mission and the vision screening program.
    - Brief description of the screening procedures
    - Using the Parent/Teacher ABC Checklist as a checklist
  - Explain the purpose of the screening and what the school can expect from the Lions club.
  - Indicate what the school will be required to do:
    - Requirements of the screening project ([attachment 1b](#) used as a checklist)
    - Need for school/parent volunteers
  - A kit of documents describing these topics (listed on the List of Attachments page as [attachments 1a through 1f](#)) may be provided to the principal/director as refresher information and checklists.

## References

- A list of Hawaii eye care providers is at [attachment 8a](#).
- To keep Hawaii Lions on the same page and using the same terminology, some common acronyms, terms and definitions related to the Vision Screening Program is at attachment 8b (to be developed)
- The Vision Screening Protocols for D50 Lions is at [attachment 8c](#).

## Post-Screening Phase

- Provide screening statistics to D50 Amblyopia Sub-Chair with copy to D-50 Sight Committee Chairman
  - A legible copy of the site sign-in sheet
  - Statistics of the screening project ([attachment 3d](#))
    - School name, date of screening
    - Host club name
    - Number of students screened, passed, referred

Attachment 3d

Vision Screening Statistics Table

The following information should be provided to the D50 Amblyopia Sub-Chair (Lion Brian Akimoto, [bakimoto@hotmail.com](mailto:bakimoto@hotmail.com)) with copy to D-50 Sight Committee Chairman (Lion Berta Jenkins, [lionbertajenkins@gmail.com](mailto:lionbertajenkins@gmail.com)) upon completing a school screening.

School Name: \_\_\_\_\_

Date of Screening: \_\_\_\_\_

Grade	Age	No. Screened	No. Passed	No. Referred
Pre-Kindergarten	3			
Kindergarten	4			
First	5			
Second	5+			
Third				
Fourth				
Fifth				
Sixth				

Please circle **Grade** for elementary school, **Age** for preschool screening.

This table merely shows one format for the information. The screening coordinator may submit this information in any form or format that suits the coordinator as long as the essential information is submitted.

*Vision Screening Statistics Table*

- B. The coordinator's responsibilities include:
- Ensure the screening equipment is complete and operational and is ready for "deployment" to the school.
    - Photoscreener/Autorefractor(s) are charged and working
    - Printer(s) are charged and working
    - Adequate supplies of printer labels and printer paper are on hand
    - Visual Acuity wall chart kit(s) and supplies are complete
  - Ensure that the Lion volunteers on the screening team are trained and familiar with the screening techniques
  - Determine if additional Lion screeners will be needed and enlist assistance from other Lions clubs.
  - Determine if additional Lion volunteers are needed and recruit Lion volunteers.
  - Inform the D50 screening calendar coordinator of the proposed screening date using the calendar request form ([attachments 3a](#) or [3b](#)).
  - The screening coordinator will make a copy of Parent Consent and Screening Results Form\* ([attachment 3c](#)) and forward the form to the school principal/director (or designated contact) approximately 30 days before the screening.

\*The Parent Consent and Screening Results Form serves two purposes:

- It informs and engages the parents/guardian for consent to have their child tested for possible vision concerns
- It documents the results of the screening

- Hand over all data forms which are to be returned to parents/guardians.
- Recommend that the parents/guardian of students who did not pass the vision screening be urged to see an eye care professional (doctor).
- Call attention to the note at the bottom of the Parent Consent and Screening Results form—if the eye care professional determines that the student’s family lacks sufficient medical insurance, have the parent/guardian contact the Lions club’s screening coordinator.
- Some financial assistance from the Hawaii Lions Foundation may be possible on a case-by-case basis.
- Suggest the school propose a date for next year’s screening
- 
- Thank the school for the opportunity to serve their community and for the refreshments (if served).

## Data Management & Conclusion

- Upon completion of testing, a data lion should inspect the data forms. Each form should identify:
  - Overall **passed**, or **referred**
  - For photoscreener/autorefractor:
    - If **referred**, printed results (a label or the full page Vision Screening Summary) will be attached
    - If **not referred** and no printed results are attached, **UTT** should be marked
  - For Distance VA tests for left and right eyes, the results indicated on the data form will be **passed**, **referred**, or **UTT** (both eyes)
  - If **UTTs** for both photoscreener/autorefractor and VA tests are marked, the student will be marked as **referred**.
- Classify the forms in a manner that is preferred by the host club—generally by grade or age, then by **passed/referred** as shown in the Screening Statistics Table at [attachment 3d](#). Document the number of forms for each classification.
- Return the room and furniture to its original configuration.
- Meet with the school principal/director or designee for a discussion on the screening.
  - Discuss the general outcome of the screening with any particular observations of interest.

## Screening Phase

### Site Preparation

- Have all Lions and volunteers sign in for the screening—ensure names are legible
- Ensure the following equipment and supplies are positioned at each station:
  - **Photoscreener/Autorefractor Station**
    - Photoscreener/Autorefractor
    - Printer
    - Extension cord (if needed)
    - Refresher “cheat sheet” for photoscreener/autorefractor
      - S12 ([attachment 4c](#))
      - Spot ([attachment 5c](#))
    - Error codes
      - S12 ([attachment 4b](#))
      - Spot ([attachment 5b](#))
  - **Wall Chart Station**
    - Wall chart with the Lea symbols (for pre-schools) or letters (for elementary schools)
    - Tape (to mount chart to vertical surface)
    - 10-foot cord (to measure distance to wall chart)
    - Eye Occluder
    - Antiseptic wipes
    - Pointer

- Lea symbol cards (to familiarize pre-school students prior to testing (at discretion of the club)
- Pen (to records results on data form)
- Critical Line Quickie Guidelines ([attachment 6b](#))

### Equipment Setup

- Arrange the furniture according to the testing protocol planned for the school, i.e. photoscreener/autorefractor and wall chart
- **Photoscreener/Autorefractor Station**
  - Adjust lighting in the screening room as needed
  - Test team's standard composition should be three Lions:
    - Lion #1: Photoscreener/Autorefractor operator to initiate the measurements
    - Lion #2: Student guide/coach to advise the student on how to sit, eyes facing directly at photoscreener/autorefractor, hair away from eyes, etc.
    - Lion #3: Data lion documents results, prints and affixes "refer" label on data form or prints full page

- At smaller vision screenings, the student should simply be directed to the data collector after being tested.

### **Visual Acuity (VA) Testing with a Wall Chart**

- For students who are unable to be screened with a photoscreener/autorefractor, the child's visual acuity will be screened using a wall chart.
- Results for each eye are indicated on the result form accordingly.
- The student should then be directed to Lion #4 (data collector) and directed to a holding area to return to class.
- At the discretion of the host club, a reward may be given to each student prior to being sent to the back-to-class holding area

- If normally worn, student must have eye glasses on.
- Test the student with a photoscreener/autorefractor.
- Advise Lion #3 (data lion) of the results of the screening.
  - As the screening progresses, Lion #4 (data collector/data summarizer) will collect completed data forms and check that they are properly marked. Lion #4 will also complete the Vision Screening Statistics Table ([attachment 3d](#))
  - At the club's discretion, the student's name may be entered via the touch screen before printing the results.
  - If the child is uncooperative or if the instrument is unable to render a pass or refer result mark the unable to test (UTT) box and have the student tested with the Wall Chart.
- Otherwise direct the student to a holding area to return to class
- At the discretion of the host club, students may receive a reward after being screened.
- How the completed data forms are collected may vary depending on the number of photoscreener/autorefractors being used.
  - For the larger schools, data form collecting, collating and quality assurance should be done by at least two data Lions to ensure data form integrity.
  - Where more than one screening station is used, a data collector Lion should collect the data forms from each station.

Vision Screening Summary if student is referred

- Roles for Lions #2 and #3 can/may be combined based on screening coordinator's preference or the number of Lions assisting with the screening.
- A chair for the photoscreener/autorefractor operator and a chair for the student placed on opposite sides of a table. For cafeterias, adjust the lunch tables; and request chairs if needed.
- Arrange the furniture in such a way as to promote a smooth flow of students to and from the test stations without interfering with ongoing screening.
- **Wall Chart Station**
  - Room adequately lit for viewing the wall chart
  - The student should be 10 feet from the wall chart
  - For consistency, a piece of tape affixed to the floor should designate the location of the student during the test.
  - Two Lion screeners can conduct the test
    - Lion #1 to cover the child's eyes and record the results
    - Lion #2 to point to the Lea symbols or letters on the wall chart
    - For older students, one Lion could conduct this test with the student holding the occluder over their eye.

- **Room Lighting.** Lighting requirements differ between screening with photoscreener/autorefractor and with wall chart, and solutions will vary depending the space available. Some suggestions are:
  - For larger rooms, the wall chart may be placed in areas with more lighting
  - Some clubs use the wall chart outdoors in a convenient setting
  - Another suggestion is to use a “pole lamp” with a low wattage LED bulb on a tripod illuminating the chart to assure consistent lighting without disturbing the ongoing electronic screening.
  - The “shade tunnel” used with the photoscreener/autorefractor is also a good solution.

## Vision Testing & Documenting Results

Lion screeners are assumed to be qualified and familiar with the use of the photoscreener/ autorefractors and the distance visual acuity testing techniques. Refresher “cheat sheets” are available at the following attachments:

- PlusOptix S12: [Attachment 4c](#)
- Welch Allyn Spot: [Attachment 5c](#)
- Visual Acuity: [Attachment 6a](#)

Training guidelines for the photoscreener/autorefractors are described in [attachment 7](#).

During the course of testing, avoid saying aloud near students words having a negative connotation such as **failed, did not pass**, etc. Use instead “referred”

## Testing with a Photoscreener/Autorefractor

- Confirm the signature of a parent or guardian on the consent form when the student is seated and is ready to be tested.

**District 50 Hawaii Lions  
Vision Screening Program  
Parent Consent and Screening Results Form**

Dear Parents/Guardian of \_\_\_\_\_, Room \_\_\_\_\_  
Please print child's legal name No Nicknames

Age: 3 4 5 or older Grade: Pre-S K 1 2 3 4 5 6  
(Please circle child's age or grade)

Your consent is necessary for a free vision screening by the \_\_\_\_\_ Lions Club at \_\_\_\_\_ School on \_\_\_\_\_. This is not an eye examination, and no eye drops are used. Your child will be asked to identify letters or symbols using eye charts, or a hand-held photoscreener/autorefractor will determine if vision problems may exist. Students who have glasses must wear their glasses to the screening.

**By my signature**, I consent to having the \_\_\_\_\_ Lions Club screen my child's vision. I understand that screening results are preliminary, are not a diagnosis of my child's vision, and that not all vision problems are detectable. I will not hold the \_\_\_\_\_ Lions Club responsible for any misinformation. The Lions do not retain any personal information following the screening.

Parent/Guardian Signature \_\_\_\_\_ Date \_\_\_\_\_

My child will not be participating or is already under an eye doctor's care.

**Screening Results**

Your child Passed the Vision Screening.  
 Your child should see an eye doctor. Please see notice below.

Age	Eye Chart Results (Critical Line Test)			Photo-screener/ Auto-refractor Used
	3 yr	4 yr	5 yr+	
Threshold	50	40	32	
Right eye	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Left eye	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

/ = Pass X = Refer  
 Unable to test

Photoscreener/Autorefractor Results (Station # \_\_\_\_\_)  
(For referral labels only)

**Notice to Parents of Students Who Are Being Referred**

The vision screening shows potential vision deficiencies that should be examined by an eye doctor. Normal vision is critical to your child's learning process. It is also easier and less costly to correct vision problems at an earlier age.

The Hawaii Lions Foundation has a program to assist students' families who don't have sufficient medical/vision insurance. The Foundation can assist with costs for an eye examination and a pair of eye glasses for families who qualify. Please ask your school for information to contact the Lions Club.

8/17/19 Thank you for your assistance and cooperation.

*Top half of Parent Consent and Screening Results Form should be completed and signed.*