STEP 4: Care for Eyes

Authors: Linda F. Lehman, Mary Jo Geyer and Laura Bolton

Photo credit: Tom Bradley
Introduction

Good vision is important for performing activities at home, work, school and play. Vision is also needed to identify injuries and health problems early. Vision is even more important for people who have lost the ability to feel in their hands and feet, because they depend even more on their vision to perform self-care and other daily activities.

Fortunately, most blindness is avoidable. Washing the face often with clean water and soap can prevent serious eye infections that may lead to blindness. Other simple ways to preserve eye health include: eating healthy foods high in vitamin A such as sweet potatoes, carrots, dark leafy greens and chilies; taking childhood immunizations (measles); and protecting the eyes from dryness, sun glare and accidental injury.

The community can also promote behavioral and environmental changes to reduce factors contributing to eye infection and/or disease. Such changes include improving individual and household cleanliness, safely storing and/or disposing of human and animal waste, and eliminating the standing water that attracts flies.

It is also important to know the difference between healthy eyes and those with problems. Healthy eyes should be bright with clear corneas, black pupils (centers), and white eyeballs. The eyelids should open and close completely. There should be no eye pain, itching or blurring of vision. Eyes that are not like this should be referred. Sudden change or loss of vision is an emergency and should be referred to an eye specialist immediately.

Goal

Promote eye health and preserve vision.

Key Messages

1. A diet rich in vitamin A is good for eye health.
2. Good personal and environmental hygiene can prevent infection that can cause blindness.
3. Identifying eye problems early and taking action to provide care or referral can preserve vision.
4. Vision is critical to helping protect hands and feet with loss of feeling.

References

Prevention and Care


E Chart

- https://www.provisu.ch/PROVISU/Age/Echart_en.pdf

Trachoma Grading: Grading should be done by somebody who is well trained and experienced through a standardization or certification process by the Global Trachoma Mapping Project.

- http://www.trachomacoalition.org/resources/global-trachoma-mapping-project-training-mapping-trachoma
- http://www.who.int/blindness/causes/trachoma_documents/en
# A Quick Supervisory Checklist for Step 4

**Care of Eyes**

<table>
<thead>
<tr>
<th>Care of Eyes</th>
<th>Yes</th>
<th>No</th>
<th>Not Obs</th>
<th>Observations &amp; Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Correctly assesses visual acuity for distance and close up</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Identifies eye problems early: sudden vision loss, red eyes, pain, bumps on eyelid, eyelashes turning inward, corneal sensory loss, muscle weakness, eyelid gap, ulcer/injury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Teaches affected person and caregiver how to:**

<table>
<thead>
<tr>
<th>Teach how to</th>
<th>Yes</th>
<th>No</th>
<th>Not Obs</th>
<th>Observations &amp; Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Keep face and eyes clean</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Safely dispose of waste and water</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Eat food high in vitamin A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Inspect eyes and check vision daily</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Protect eyes during the day and night</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Strengthen weak eye muscles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Step 4: Care for Eyes

Guidelines for Teaching the Module
Health Coach/Facilitator should use the local language and ensure that all terms are found in the local language.

Estimated time: 2-3 hours

Learning Objectives
At the end of the module, participants will be able to:
1. List simple actions that individuals can do to preserve eye health.
2. Describe individual and household behaviors that reduce factors contributing to eye infection and/or disease.
3. Demonstrate how to screen and detect basic vision and eye problems.
4. Describe how eye problems can be treated at the community level and when they need to be referred.

List of Teaching Activities and Learning Materials

Activity 1
Preventive Actions for Eye Health

Activity 2
Vision and Basic Eye Screen

Activity 3
Community Eye Care and Referral

Handouts
- 4.1 Preventive Actions for Eye Health
- 4.2 Vision Screen Instructions
- 4.3 Instructions for Eye Screen
- 4.4 Individual Impairment Record Form (IIRF) – Vision & Eye Section
- 4.5 Trachoma Grading
- 4.6 Community Eye Care or Referral
- 4.7 Techniques for Eye Care
Activity 1: Preventive Actions for Eye Health

Handouts
- 4.1 Preventive Actions for Eye Health

Equipment & Materials
- Flip chart stand and paper
- 4 – 6 colored markers
- 5 pieces of A4 blank paper for each group
- 1 pen or colored marker per group

Instructions for Teaching the Activity
Room Arrangement: Participants are divided into small groups with three to four persons per group.

1. Health Coach writes the following five categories on the flip chart:
   - Practice good personal hygiene
   - Practice good personal and household cleanliness
   - Eat healthy foods
   - Immunize
   - Protect eyes

2. Health Coach gives five pieces of blank A4 paper and one pen or colored marker to each group.

3. The Health Coach explains that each group will be making recommendations on specific actions that will promote good eye health and vision for each of the five categories.

4. Groups are given 10 minutes to discuss and make recommendations for each category.

5. Each group will write their recommendations down for each category on separate pieces of paper.

6. Health Coach begins the discussion with the first category, “Practice good personal hygiene,” and asks for one group to report. Other groups add recommendations without repeating recommendations from the previous groups. The Health Coach or a volunteer will record each response on the flip chart.

7. The groups continue to present recommendations for remaining categories until all recommendations have been presented.

8. The Health Coach distributes the handout 4.1 Preventive Actions for Eye Health.

9. The entire group reviews the handout and compares with their responses on the flip chart. Any missing preventive actions are added to the flip chart.
Step 4: Care for Eyes

Activity 2: Vision and Basic Eye Screen

Handouts
4.2 Vision Screen Instructions
4.3 Instructions for Eye Screen
4.4 Individual Impairment Record Form (IIRF) – Vision & Eye Section
4.5 Trachoma Grading

Equipment & Materials
- Flip chart stand and paper
- 4 – 6 colored markers
- Water and soap to wash hands
- 1 roll of paper towels to dry hands
- 1 box of disposable gloves
- 1 box of cotton swabs or matchsticks to assist in turning over eyelids (optional)
- 1 measuring tape
- 1 torch or flashlight
- 1 small magnifying glass
- 2 Snellen E-Charts (see Appendix)
- 2 6-meter strings/cords knotted at every meter
- 2 eye covers (large spoon)
- 2 black-capped pointers/pens
- 2 pieces of A4 blank paper
- Copies of 4.4 IIRF – Vision & Eye Section for practice in recording
- Pens/Pencils to record responses
- Torch/Flashlight for each pair
- Small magnifying glass for each pair
- Tissue box for each pair

Instructions for Teaching the Activity
Room Arrangement: Participants sit in a circle for Health Coach demonstration and then participants will be grouped in pairs.

1. Health Coach distributes handouts: 4.2 Vision Screen Instructions, 4.3 Instructions for Eye Screen and 4.4 Individual Impairment Record Form (IIRF) – Vision & Eye Section to participants.

2. Health Coach explains and demonstrates how to set up a vision screen area, emphasizing adequate lighting and accurate and consistent distance between people being examined and the Snellen E-Chart or finger count.

3. Health Coach requests one volunteer. He then explains and demonstrates how to do the vision and eye screens and how to record the results of the screens done on the volunteer.

4. Health Coach asks participants to set up a second vision screening area.

5. Health Coach divides the group into pairs.

6. The pairs practice doing the vision and eye screens on each other while the Health Coach observes and provides feedback on their screening and recording techniques and accuracy.
Activity 3: Community Eye Care and Referral

Handouts
- 4.5 Trachoma Grading
- 4.6 Community Eye Care or Referral
- 4.7 Techniques for Eye Care

Equipment & Materials
- Flip chart stand and paper
- 4 – 6 colored markers
- 1 box of disposable gloves
- Water and soap to wash hands
- 1 roll of paper towels to dry hands
- 1 small bottle of clean water or physiological solution
- 1 small magnifying glass
- 1 pair of tweezers
- 1 bottle artificial tears
- 1 box of cotton swabs to assist applying ointment
- 1 tube of eye ointment
- 1 box of clean tissues
- 10 squares of gauze pads
- 1 roll of adhesive tape
- 1 pair of scissors
- 1 thin plastic folder and/or used x-ray film and/or posterboard to make eye shield
- 1-meter cord and/or thin elastic tape

Instructions for Teaching the Activity
Room Arrangement: Participants sit in a circle.

1. Health Coach distributes handouts 4.5 Trachoma Grading, 4.6 Community Eye Care or Referral and 4.7 Techniques for Eye Care.

2. Health Coach reviews eye problems and explains and/or demonstrates appropriate community care and referral.

3. Health Coach asks for a volunteer and then demonstrates how to clean eyelids, use eye drops, apply eye ointment, remove eyelash and make and apply an eye patch.

4. Health Coach and participants discuss community care recommendations and issues related to referral.

5. Health Coach emphasizes the need to routinely examine eyelids in trachoma-endemic areas.
Step 4: Care for Eyes

Conclusion

At the end of each teaching activity the Health Coach summarizes key messages and clarifies any misconceptions.
## Handout 4.1: Preventive Actions for Eye Health

<table>
<thead>
<tr>
<th>Preventive Actions</th>
<th>Details</th>
</tr>
</thead>
</table>
| 1. Practice good personal hygiene | • Discourage face-seeking flies by washing face and hands frequently with soap and clean water.  
• Wash hands prior to and after touching the eye or playing with children.  
• Do not wipe sweat from eyes using dirty work shirts or other work/play clothing.  
• Prevent exposure of eyes to dust, pesticides and other contaminants.  
• Do not share personal items; e.g., handkerchiefs, cosmetics, towels, bedding. |
| 2. Practice good personal and household cleanliness | • Properly store/dispose of household, animal and human waste (i.e. burn, bury, put in latrine) and move livestock away from house to reduce the number of flies.  
• Construct, use and maintain latrines and refuse pits. |
| 3. Eat healthy foods | • Grow and eat foods high in vitamin A:  
  - **Red, yellow and orange vegetables and fruits**: carrots, sweet potatoes, dark green leafy vegetables, butternut squash, mango, melons, apricots  
  - **Lettuce**: red and dark green  
  - **Liver and dairy products**: turkey, beef, chicken, other  
  - **Herbs & spices**: paprika, red pepper, cayenne, chili powder, basil, parsley, oregano |
| 4. Immunize | • Protect against disease with measles vaccine and other vaccines. |
| 5. Protect eyes | • Shade eyes with wide-brimmed hat and/or sunglasses.  
• Protect eyes from injury during work activities such as woodworking, welding, etc.  
• Protect eyes from smoke, blowing sand, dirt and other debris.  
• For eyes that do not close completely, protect from dryness and debris. Use drops to moisten eyes frequently. During the day use glasses; at night use an eye shield/cover. Self-check vision daily.  
• For eyes with loss of feeling, “Think Blink” frequently and self-check vision daily. |
| 6. Refer | • Contact supervisor and/or refer to hospital immediately if an eye injury occurs or one of the following is present:  
  - Sudden change in vision with or without a red eye and/or with or without pain and/or “itchy” feeling.  
  - Difficulty closing the eye completely, with the eye exposed during the day and while sleeping.  
  - Eyelashes turned in and touching the eye, a cornea (eye) which is dull (not bright), a pupil that is no longer black and/or vision that is worse. |
Step 4: Care for Eyes

Handout 4.2: Vision Screen Instructions

Preparation for Vision Screen

1. Gather together equipment and supplies: Snellen E-Chart (see Appendix), 6-meter length cord knotted at every meter, chair, eye cover (large spoon), black-tipped pointer/pen with black cap, sheet of blank paper, pencil/pen, flashlight and IIRF record form.

2. Use a 6-meter string or measuring tape to measure 5 meters from Snellen E-Chart to the back of the chair where person will sit.

3. Snellen E-Chart should be placed in a well-lighted area with no reflection off the chart. If outside, the sun should be behind the person taking the test.

4. Snellen E-Chart should be placed so that line 8 is at eye level.

5. Draw an “E” on a piece of paper and show the paper to the person. Ask the person to imagine that the “E” is a table with legs and have them use their hand to show the direction that the legs are pointing. Practice changing the direction of the “E” to make sure it is understood.

6. Explain to the person that you want to determine the smallest line they are able to see.

7. If the person is wearing glasses, test with glasses on.

<table>
<thead>
<tr>
<th>Measuring Distance Vision with Tumbling E Eye Chart</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ask the person to cover the left eye. Test the right eye.</td>
</tr>
<tr>
<td>2. Tester places pointer vertically, below the largest letter without covering the letter. The tester asks the person to show the direction the legs are pointing.</td>
</tr>
<tr>
<td>3. Tester proceeds down the chart to determine the smallest line that the person can read. Lines may be skipped to more quickly determine the smallest line visible. If the person cannot see more than half of the line tested, return to the preceding line and test.</td>
</tr>
<tr>
<td>4. Record the line number on the IIRF recording form of the smallest line in which the person can see more than half of the Es.</td>
</tr>
<tr>
<td>5. Ask the person to cover the right eye. Repeat the test with the left eye and record the results.</td>
</tr>
<tr>
<td>6. If person cannot see the largest E, then use the finger counting test.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Finger Counting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To test, the person remains sitting and covers the left eye.</td>
</tr>
<tr>
<td>2. The tester stands 6 meters away and holds up a set number of fingers. The person is asked to tell the number of fingers seen.</td>
</tr>
<tr>
<td>3. Repeat this process three times with a different number of fingers each time. If unable to see two out of three trials at 6 meters, the tester uses the knotted cord and steps 1 meter closer to the person and repeats the finger count. Record on the IIRF form the greatest distance at which fingers can be counted.</td>
</tr>
<tr>
<td>4. If no ability to count fingers at 1 meter, ask person to tell whether tester hand is moving or still. If no movement detected, check perception of light with a flashlight. Record movement, light perception, or no perception on the IIRF.</td>
</tr>
<tr>
<td>5. Cover the right eye and repeat finger counting three times using a different number of fingers.</td>
</tr>
<tr>
<td>6. Record on the IIRF form the best finger counting distance/movement/light perception or no light perception for each eye.</td>
</tr>
</tbody>
</table>

Continues on next page
Handout 4.2: Vision Screen Instructions (continued)

Snellen E-Chart for children  http://www.provisu.ch
(See Appendix)

1. Print the test page in A4 standard format. The child has to be located 1.6 meters (or 5 feet) away from the chart. If the test page is in another format, or if you wish to perform the test with the child facing the screen, you will have to calculate the distance at which the child must stand facing it, using the following formula: measure the height of the letter E (first line, 20/200) in millimeters. Then, divide the value of this measurement by 88. Finally, multiply it by 6. The result shows the distance at which the child must be placed, in meters, e.g., \((23/88) \times 6 = 1.6\) m.

2. Test the visual acuity with correction (e.g. glasses).

3. Test one eye at a time. Start with the right eye, covering the left one without pressing on it. Then, examine the left eye by doing the opposite. If the child is using correction glasses, you can cover the eye with a sheet of paper.

4. The child has to indicate the orientation of the branches of the letter E (top, bottom, right, left), from the largest E to the smallest. He can either use a small instrument that reproduces the shape of the optotype (E) and then orientate it in the same direction as the test showed, or indicate the orientation with his hand.

5. To make the examination easier and faster, another person can help you show the Es the child must read among the different lines of Es.

6. If the child can read the Es of the 10th line, his/her sight is optimal (visual acuity 20/20).

7. If his visual acuity is less than 20/20 (20/25, or the ninth line, is also acceptable for 3-year olds), or if you have doubts about the child’s sight, visit your ophthalmologist.

NOTE: Take the results as a recommendation. The results do not indicate a diagnosis whatsoever. Performing the test does not mean the child should skip regular visits to his/her eye doctor, because you could easily miss signs that only a trained eye care practitioner would find.
Handout 4.3: Instructions for Eye Screen

**Preparation for eye screen**
Gather together equipment and supplies: flashlight/torch with batteries, magnifying glass, clean water and soap for washing hands, roll of paper towels, matchsticks, pens (red and blue/black) and IIRF Form.

**Important:** Wash hands with soap and water before and after each eye screen.

<table>
<thead>
<tr>
<th>Complaints</th>
<th>Ask</th>
<th>Record on IIRF Form: Circle symptom(s), Yes, R and/or L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient or family complaints or observations</td>
<td>Do your eyes have the following: pain, irritation, itching, gritty sand feeling, pain or discomfort to light, other? If yes, what symptom and which eye(s)?</td>
<td></td>
</tr>
<tr>
<td>History</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous eye injury or problem.</td>
<td>Have you ever had an injury or problem with your eyes? If yes, which eye(s) and what kind of injury or problem?</td>
<td>Record on IIRF Form: Circle Yes, R and/or L and type of injury/problem</td>
</tr>
<tr>
<td>Type: ___________________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recent change in vision.</td>
<td>Have you noticed any recent change in your vision? If yes, which eye(s) or both? When did you notice the change?_______ (estimate in months)</td>
<td>Record on IIRF Form: Circle Yes, R and/or L.</td>
</tr>
<tr>
<td>When _____ (in months)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eye Conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased tears and/or eye</td>
<td>Observe eyes for excessive tearing and secretions. If yes, what sign(s) and which eye(s)?</td>
<td>Record on IIRF Form: Circle sign(s), Yes, R and/or L</td>
</tr>
<tr>
<td>secretions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eye redness</td>
<td>Observe eyes for redness. If yes, which eye(s)?</td>
<td>Record on IIRF Form: Circle Yes, R and/or L</td>
</tr>
<tr>
<td>Eye redness with recent change in vision and/or pain</td>
<td>If there is eye redness, ask again if there is a change in vision and/or pain.</td>
<td>Record on IIRF Form: Circle symptom(s), Yes, R and/or L</td>
</tr>
<tr>
<td>Eye is dull, has injury/ulcer,</td>
<td>Observe eyes for dull area(s), injury/ulcer, white center (pupil), white/reddish thick skin on lower half of eye or on nasal side of eye. If yes, which eye(s)?</td>
<td>Record on IIRF Form: Circle Yes, R and/or L</td>
</tr>
<tr>
<td>white center, white/reddish thick</td>
<td></td>
<td></td>
</tr>
<tr>
<td>scar/skin on lower half or eye or on nasal side of eye</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eye closure is not complete with light closure</td>
<td>Observe eyes while asking person to close their eyes lightly as in sleeping. Lift the chin and observe for 10 seconds to see if closure is complete. If closure is not complete, which eye(s)?</td>
<td>Record on IIRF Form: Circle Yes, R and/or L</td>
</tr>
<tr>
<td>Eye blink is less often than normal or absent *</td>
<td>Casually observe the frequency of blinking during the eye screen. If less than 10 blinks per minute, which eye(s)?</td>
<td>Record on IIRF Form: Circle Yes, R and/or L</td>
</tr>
</tbody>
</table>

*Note: People may blink more frequently if they feel an eyelash or other irritation. Loss of the ability to feel results in fewer blinks per minute and dry eyes. Average number of blinks is 10 – 30 per minute (fewer blinks if intently watching something like a TV, computer screen, etc.).

Continues on next page
### Handout 4.3: Instructions for Eye Screen (continued)

<table>
<thead>
<tr>
<th><strong>Eye Conditions</strong></th>
<th>Description</th>
</tr>
</thead>
</table>
| Upper/lower eyelid(s) are turned inward | With eyes open, observe the border of the eyelids of each eye from the side. If eyelids are turned inward, which eyelid(s)?  
**Record on IIRF Form:** Circle Yes, R and/or L |
| Upper/lower eyelid(s) are turned outward | With eyes open, observe the border of the eyelids of each eye from the side. If eyelids are turned outward, which eyelid(s)?  
**Record on IIRF Form:** Circle Yes, R and/or L |
| Upper/lower eyelashes are turned inward touching the eye | With eyes open, observe eyelashes of each eye from the side. Gently lift/pull eyelid(s) away from the eye and observe eyelash position. If eyelashes are turned inward touching the eye, which eye(s)?  
**Record on IIRF Form:** Circle Yes, R and/or L |
| Turn out the upper eyelid(s): inside lid is red | Ask the person to relax and look down. Take the upper eyelid and lashes between the thumb and forefinger and pull the lid straight out. Place a matchstick or finger of the other hand on the eyelid near the border to help turn out the upper lid. Hold and observe for redness. Repeat the process with the other eye. If the inside lid(s) is red, which lid(s)?  
**Record on IIRF Form:** Circle Yes, R and/or L |
| Turn out eyelid(s): inside lid has bumps/lumps/bands | Turn out eyelid as previously described. Hold and observe for bumps/lumps/bands. Repeat the process with the other eye. If the inside lid(s) is red, which lid(s)?  
**Record on IIRF Form:** Circle Yes, R and/or L |
### Handout 4.4: Individual Impairment Record Form (IIRF) – Vision & Eye Section

#### Vision Screen (see handout 4.2 for instructions on how to do the vision screen)

<table>
<thead>
<tr>
<th>Uses glasses for distance</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses glasses for close up (reading, handwork, sorting beans, etc.)</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

**Snellen E-Chart:** Vision for each eye. If glasses are used for distance, test with glasses

<table>
<thead>
<tr>
<th>Right</th>
<th>Left</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line No. ______</td>
<td>Line No. ______</td>
</tr>
</tbody>
</table>

**Finger count:** Number of meters able to count fingers starting at 6 meters

<table>
<thead>
<tr>
<th>Right</th>
<th>Left</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meters ______</td>
<td>Meters ______</td>
</tr>
</tbody>
</table>

#### Eye Screen (see handout 4.3 for instructions on how to do the eye screen)

**Complaints**

<table>
<thead>
<tr>
<th>Pain (R, L), irritation (R, L), itching or gritty feeling like sand (R, L), sensitivity to light (R, L) – Circle complaint and side</th>
<th>Yes</th>
<th>R</th>
<th>L</th>
</tr>
</thead>
</table>

**History**

<table>
<thead>
<tr>
<th>Previous eye injury or problem. Type: __________________________</th>
<th>Yes</th>
<th>R</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recent change in vision. When_______(in months)</td>
<td>Yes</td>
<td>R</td>
<td>L</td>
</tr>
</tbody>
</table>

**Eye Conditions**

<table>
<thead>
<tr>
<th>Increased tears and/or eye secretions</th>
<th>Yes</th>
<th>R</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye redness</td>
<td>Yes</td>
<td>R</td>
<td>L</td>
</tr>
<tr>
<td>Eye redness with recent change in vision and/or pain</td>
<td>Yes</td>
<td>R</td>
<td>L</td>
</tr>
<tr>
<td>Eye is dull, has injury/ulcer, white center, white/reddish thick scar on lower half of eye or on nasal side of eye</td>
<td>Yes</td>
<td>R</td>
<td>L</td>
</tr>
<tr>
<td>Eye closure is not complete with light closure</td>
<td>Yes</td>
<td>R</td>
<td>L</td>
</tr>
<tr>
<td>Eye blink is less often than normal (less than 10 blinks per minute) or absent</td>
<td>Yes</td>
<td>R</td>
<td>L</td>
</tr>
<tr>
<td>Upper/lower eyelid(s) are turned inward</td>
<td>Yes</td>
<td>R</td>
<td>L</td>
</tr>
<tr>
<td>Upper/lower eyelid(s) are turned outward</td>
<td>Yes</td>
<td>R</td>
<td>L</td>
</tr>
<tr>
<td>Upper/lower eyelashes are turned inward touching the eye</td>
<td>Yes</td>
<td>R</td>
<td>L</td>
</tr>
<tr>
<td>Turn out eyelids: inside lid is red</td>
<td>Yes</td>
<td>R</td>
<td>L</td>
</tr>
<tr>
<td>Turn out eyelids: inside lid has bumps/lumps/bands</td>
<td>Yes</td>
<td>R</td>
<td>L</td>
</tr>
</tbody>
</table>

*Note: People may blink more frequently if they feel an eyelash or other irritation. Loss of the ability to feel results in fewer blinks per minute and dry eyes. Average number of blinks is 10 – 30 per minute (fewer blinks if intently watching something like a TV, computer screen, etc.).*
### Handout 4.5: Trachoma Grading

<table>
<thead>
<tr>
<th><strong>TF Trachomatous Inflammation – Follicular</strong></th>
<th><strong>TI Trachomatous Inflammation – Intense</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The presence of five or more follicles in the upper tarsal conjunctiva.</td>
<td>Pronounced inflammatory thickening of the tarsal conjunctiva that obscures more than half of the normal deep tarsal vessels.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>TS Trachomatous Scarring</strong></th>
<th><strong>TT Trachomatous Trichiasis</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The presence of scarring in the tarsal conjunctiva.</td>
<td>At least one eyelash rubs on the eyeball or evidence of recent removal of in-turned eyelashes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>CO Corneal Opacity</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Easily visible corneal opacity over the pupil.</td>
</tr>
</tbody>
</table>

Copyright © 2004 International Centre for Eye Health, London

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1705737
### Handout 4.6: Community Eye Care or Referral

#### Problems Identified by Vision & Eye Screen

<table>
<thead>
<tr>
<th>Step</th>
<th>Problem Description</th>
<th>Community Care</th>
<th>Refer for Complete Eye Exam and Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Sudden decrease in vision with pain (glaucoma)</td>
<td>• Urgent, refer <strong>immediately</strong></td>
<td>Urgent, refer <strong>immediately</strong>.</td>
</tr>
<tr>
<td>2.</td>
<td>Complaints of pain and/or sensitivity to light with recent change in vision</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>White, dull area which is an ulcer or foreign body</td>
<td>• Clean, cover</td>
<td>Urgent, refer <strong>immediately</strong>.</td>
</tr>
<tr>
<td>4.</td>
<td>Vision loss is greater in one eye compared to the other with no other problems</td>
<td>• Place on list for possible corrective lenses</td>
<td>Refer <strong>as soon as possible</strong>. Schoolchildren are a priority for corrective lenses.</td>
</tr>
<tr>
<td>5.</td>
<td>Cannot see smaller than line 6 on the E Chart in either eye</td>
<td>• Place on list for possible corrective lenses</td>
<td>Refer <strong>if possible</strong>. Schoolchildren are a priority for corrective lenses.</td>
</tr>
</tbody>
</table>
| 6.   | Cannot see the largest E (line 1) on eye chart or cannot count fingers at 6 meters (leprosy) or 3 meters (other) | • Consider eyes “at risk,” “blind” or “Grade 2” in leprosy programs  
• Practice good personal and environmental hygiene  
• Self-care training for persons with sensory loss in hands and/or feet | In leprosy, refer **immediately**. Others, refer **as soon as possible**. |
| 7.   | Unable to count fingers at 3 meters with dull white central area present (cataract) | • Good personal and environmental hygiene  
• Adaptive training for low vision | Refer **as soon as possible** for surgery. |
| 8.   | Complaints: burning, itching, sand-like feeling | • Good personal and environmental hygiene  
• Artificial tears to moisten eyes (given by health worker)  
• Practice “Think Blink” | If not improved in 1–2 weeks, refer. |
| 9.   | Red eye | | |
| 10.  | Inability to close eyes | | |
| 11.  | Forgets to blink | • Assist with or strengthen eye closure  
• Protect eyes | |

*Continues on next page*
### Problems Identified by Vision & Eye Screen

<table>
<thead>
<tr>
<th>Problem Description</th>
<th>Community Care</th>
<th>Refer for Complete Eye Exam and Diagnosis</th>
</tr>
</thead>
</table>
| 12. Excessive tearing | • Teach to dry the eyes safely with a clean cloth  
  • Health education for self-care | Refer to remove eyelashes or other foreign body immediately.  
Refer for correction of lower lid position as possible. |
| 13. Lower eyelid turning out | • Health education for self-care | |
| 14. Secretions | • Clean  
  • Good personal and environmental hygiene  
  • Protect eyes | If not improved in 1–2 weeks, refer. |
| 15. Inside eyelid is red, has bumps/lumps | • Clean  
  • Practice good personal and environmental hygiene  
  • Artificial tears to moisten eyes (given by health worker) | Refer immediately for possible trachoma. |
| 16. Eyelid turned inward, has bands inside eyelid  
  17. Eyelashes turned inward touching the eye | • Place on list for corrective surgery  
  • Good personal and environmental hygiene  
  • Artificial tears to moisten eyes (given by health worker) | Refer as soon as possible for surgical correction of eyelid and eyelashes. |

### Groups at Risk

<table>
<thead>
<tr>
<th>Group Description</th>
<th>Recommended Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>18. Children</td>
<td>• Avoid playing in sandy areas that might have cat feces</td>
</tr>
<tr>
<td>19. Females prior to pregnancy</td>
<td>• Vaccinate for measles, TB, other</td>
</tr>
</tbody>
</table>
| 20. Pregnant women | • Avoid ingestion of food or water contaminated with cat feces  
  • Screen for gonorrhea, syphilis, HIV |
| 21. Mothers with gonorrhea | • Use 1% silver nitrate drops in eyes of newborn within one hour of birth |
Step 4: Care for Eyes

Handout 4.7: Techniques for Eye Care

<table>
<thead>
<tr>
<th>Daily self-check of vision</th>
<th>If the eye is dry and not moist enough, vision will become blurry.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Dry eye</td>
<td>1. Stand and look at the same object, the same time of day.</td>
</tr>
<tr>
<td>• Difficulty closing eyes completely</td>
<td>2. Check clarity of object with each eye separately.</td>
</tr>
<tr>
<td>• Forget to blink enough</td>
<td>3. If vision seems worse or more blurry. “Think blink” for five minutes and recheck. If vision improves, you need to remember to blink more often. If worse, seek help.</td>
</tr>
</tbody>
</table>

Always wash hands with soap and water before proceeding with eye care.

**Cleaning the eye**
1. Wash eye by putting clean water into a cupped hand and place over the eye, with the eye open.
2. Rinse the eye thoroughly by tilting the head forward and backward.
3. Wash hands with soap and water again and repeat with other eye if needed.

**Cleaning the eyelids**
1. When cleaning the upper eyelid, look down and gently lift the upper lid up. Moisten a cotton swab, gently rolling the swab across the eyelid, away from the eye.
2. When cleaning the lower eyelid, look up and gently lower the lower lid down. Moisten a cotton swab, gently rolling the swab across the eyelid, away from the eye.

**Putting in eye drops**
- Used to moisten eye
- Used if there is an infection
- Used if there is glaucoma (high eye pressure)
Follow the doctor’s prescription and practice putting drops in eye without touching the eyelashes or eye. If unable to do the following, get help.
1. Look up.
2. With the thumb and index finger, gently pinch and pull out the lower eyelid making a small “pouch.”
3. Place one drop in the “pouch,” gently close the eye and release pinch.
5. If a second drop is needed, wait about five minutes and repeat the same procedure.

**Using eye ointment**
- Used at night to keep eye moist
- Used if there is an infection
Follow the doctor’s prescription and practice putting ointment in the eye without touching the eye. If unable to do the following, get help.
1. On a clean cotton swab, place a “pin-head size” of ointment on the tip of the swab.
2. Look up and gently pull out the lower eyelid creating a “pouch.”
3. Gently place the cotton swab on the lower lid and roll the ointment into the “pouch.”
4. Gently close the eye and release the pinch.
5. Keep the eye gently closed for 20-30 seconds.

Continues on next page
Handout 4.7: Techniques for Eye Care (continued)

<table>
<thead>
<tr>
<th>In order to decrease eye exposure to the sun and the drying effects of the wind, and to protect the eye from dirt and other foreign objects:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Use a broad-brimmed hat.</td>
</tr>
<tr>
<td>2. Use sunglasses.</td>
</tr>
</tbody>
</table>

**Protection during the night**
- **Protect eyes which cannot close completely**

In order to decrease eye exposure and drying effects of the constantly open eye at night, and to protect the eye from dirt and other foreign objects falling into the eye at night:

1. Put in eye ointment/oil prior to sleeping.
2. Cover the exposed eye with an eye shield/cover that does not touch the eye (dome or cone shaped).

**Making an eye shield/cover**

If someone is unable to close his/her eye completely (Lagophthalmos), the following eye shield/cover is safest to use at night or when covering the eye if there is an ulcer. It prevents the patch from touching the eye that cannot close completely.

1. Cut a circle out of a piece of cardboard or used, cleaned transparent x-ray film or other thin plastic sheet.
2. Make a cut from one edge of the circle to the middle and stop.
3. Overlap the edges, making a cone.
4. Put adhesive tape on the inside and outside to hold the dome/cone shape.
5. Tape the cone over the eye or attach elastic or ties to fix the patch in place over the eye.

Note: Patients whose hands cannot feel, prefer the shield/cover to be transparent when it is necessary to cover both eyes.

**Foreign body/Eyelash turned in and touching the eye**

If the foreign body is metal, do not try to remove but close the eye, cover and send immediately to the doctor. If other:

1. Look for a foreign body/eyelash without turning over the upper eyelid.

If the foreign body/eyelash is not found:

1. Ask the person to look down but not to close the eye.
2. Take the eyelid between the thumb and forefinger and with a matchstick/cotton tip or finger, turn the eyelid up so the whole inner eyelid (conjunctiva) is in view.
3. Look for the foreign body/eyelash.
4. When you have found it, carefully remove with a clean moistened cotton swab or the tip of a clean moistened cloth.

If eyelashes are turning in and touching the eye:

1. If only one or two, remove with clean tweezers.
2. If many, refer for surgical removal.