Example of clinical vision screening protocol: Guidelines for Teachers

THE EYE AND VISION SCREENING PROTOCOL

The purpose of the vision screening protocol is to identify the persons in need of refractive, clinical or hospital-based services and to refer accordingly.

DISTANCE VISION SCREENING

- The vision screener has a single line of symbols (6/9) for vision screening.
- The child is able to see the target if she or he correctly indicates the direction in which the legs of the symbol are pointing.
- Inability to identify the symbols correctly indicates that the child’s vision is below normal and he or she needs to be further examined and treated at a facility with an eye clinic with a suitable eye care practitioner, such as an ophthalmic clinical officer or an optometrist or an ophthalmologist, and the necessary equipment and infrastructure.

The Vision Screener

Procedure:

- Take the vision screener close to the child and explain that you will point at the 5 Es and s/he should point at the direction of the “legs” of the E.
- If the child normally wears eye glasses to see in the distance, tell her/him to wear them during the test.
- Ask the child to stand 3 meters from the chart (measure the distance using the tape or rope provided).
- Ask the child to cover their left eye with the occluder, or with the palm of their hand (NOT their fingers as they may peep between them). Tell the child not to press on the eye being covered.
- Test the right eye first. Stand behind the vision screener and point at the row with small symbols. Record the findings in the record form (see the section below on Pass/Fail criteria and Record Form attached).
- Then ask the child to cover the right eye to test the left eye. Record the findings in the Record Form.
PASS

- The test is passed if the child correctly indicates the direction of at least 4 of the 5 symbols with each eye.
- Record this in the Distance Visual Acuity (Distance VA) column as PASS.

FAIL

- A FAIL is recorded if the child can only see 3 or less Es in EITHER eye.

Example

A child correctly identifies: R 4 out of 5 Es  L 2 out of 5 Es

<table>
<thead>
<tr>
<th>Distance VA: Right eye</th>
<th>Distance VA: Left eye</th>
<th>Eye health exam Right eye</th>
<th>Eye health exam Left eye</th>
<th>Referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>PASS/FAIL</td>
<td>PASS/FAIL</td>
<td>PASS</td>
<td>FAIL</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Pass</td>
<td>Fail</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

For eye care practitioners conducting screening

- If the child is able to correctly identify at least 4 out of the 5 symbols, place a +2.00 lens over the eye and repeat the vision measurement.
- If the child is still able to correctly identify ANY of the 5 symbols, he/she has FAILED the vision screening, as this result indicates hyperopia. This child should be referred.
- Record as with +2.00 and FAIL.

What to do when a problem is detected when conducting the vision screening

- Children who fail the vision screening must be referred to an eye department for a comprehensive eye examination or at temporary facility set up at the school.
SCREENING THE HEALTH OF THE OUTSIDE OF THE EYE

- Always wash your hands before touching the child’s face or eyelids
- Use a torch or pen light to see more clearly
- Always inform the child of what you are about to do before doing it
- You may have to move the lids (shown in the figure below) to see the parts of the eye hidden by the eyelids.

Penlight examination of the outside of the eye and examination of the eyelid conjunctiva
Photo courtesy Brien Holden Vision Institute

<table>
<thead>
<tr>
<th>STRUCTURE</th>
<th>APPEARANCE OF THE NORMAL EYE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyelids</td>
<td>The normal <strong>eyelids</strong>:</td>
</tr>
<tr>
<td></td>
<td>• open and close properly</td>
</tr>
<tr>
<td></td>
<td>• look <strong>clean</strong> – no scales or dried pus</td>
</tr>
<tr>
<td></td>
<td>• look <strong>smooth</strong> with no lumps</td>
</tr>
<tr>
<td></td>
<td>• have <strong>lashes that turn away</strong> and not scratching the inner structures of the eye</td>
</tr>
<tr>
<td></td>
<td>• do not look red, puffy or swollen.</td>
</tr>
<tr>
<td>Cornea</td>
<td>The corneal must be transparent and shiny</td>
</tr>
<tr>
<td>Conjunctiva</td>
<td>There are two parts to the conjunctiva:</td>
</tr>
<tr>
<td></td>
<td>Bulbar conjunctiva that covers the front part of the sclera which should:</td>
</tr>
<tr>
<td></td>
<td>• look clear and smooth</td>
</tr>
<tr>
<td></td>
<td>• let the whiteness of the sclera show through</td>
</tr>
<tr>
<td></td>
<td>• show only a few small blood vessels</td>
</tr>
<tr>
<td></td>
<td>• show no red parts or bumps</td>
</tr>
<tr>
<td></td>
<td>• show no pus, watering nor bleeding.</td>
</tr>
<tr>
<td></td>
<td>The eyelid conjunctiva that covers the inside of the eyelids which should:</td>
</tr>
<tr>
<td></td>
<td>• be smooth and pinkish, not red</td>
</tr>
<tr>
<td></td>
<td>• not have bumps, lumps or growths</td>
</tr>
<tr>
<td></td>
<td>• no have foreign bodies.</td>
</tr>
<tr>
<td>Sclera</td>
<td>• The white of the eye should be white in colour</td>
</tr>
<tr>
<td>Pupil</td>
<td>The pupil should:</td>
</tr>
<tr>
<td></td>
<td>• be black, round, equal in size and central</td>
</tr>
<tr>
<td></td>
<td>• <strong>get smaller</strong> when light is shone into the eye</td>
</tr>
<tr>
<td></td>
<td>• <strong>get bigger</strong> when light is taken away from the eye.</td>
</tr>
</tbody>
</table>
SIGNS OF HEALTHY EYES

If you notice any problems with eye health, then REFER the patient.

The conjunctiva should be clear showing the white color of the sclera and fine blood vessels
Photo courtesy Brien Holden Vision Institute

The cornea must be transparent and shiny
Photo courtesy Brien Holden Vision Institute

The eyes should be straight
Photo courtesy Brien Holden Vision Institute

The conjunctiva should be clear showing the white color of the sclera and fine blood vessels
Photo courtesy Brien Holden Vision Institute

SIGNS OF UNHEALTHY EYES

Here are some examples of what unhealthy eyes may look like

Inward turn of the left eye
Photo courtesy of Brien Holden Vision Institute Global Optometry

White pupil
Photo courtesy of LV Prasad Eye Institute

Diseased cornea that is not transparent
Photo courtesy of LV Prasad Eye Institute

Red bulbar conjunctiva and swollen eye lids.
Photo courtesy of IACLE

Bitot’s spot from Vitamin A deficiency on conjunctiva
Photo courtesy of International Centre for Eye Health

An eye with discharge, bumps and red conjunctiva from infection
Photo courtesy of International Centre for Eye Health
SUSPICIOUS SYMPTOMS

Teachers and parents should be taught to **look for symptoms and signs** that could mean the child has a refractive error or an eye problem.

They should notice if children:

- hold books very close to their eyes
- sit close to the TV or board
- complain of distance or near blur
- squeeze their eyes half closed when looking at the board
- copy from the child next to them
- poor concentration or behaviour
- If children cannot see clearly they may turn their attention to something else. Their schoolwork may be poor
- leave out words or sentences when reading
- blink or rub their eyes a lot
- twist or tilt their heads to use one eye more than the other
- complain of headaches or eyestrain after they have read for a long time
- poor night vision

Children with any of the above reported symptoms should be referred for an eye examination. The symptoms should be recorded as part of the reason for referral.

RECORDING THE FINDINGS

The results of the screening should be recorded as either PASS or FAIL for each eye in the Log Sheet. This form should also contain data from the screening, name of the child, age, gender and a column for reason of referrals (see example of form below). A printable version of the Log Sheet appears at the end of this document.

**If a child has failed a screening of vision or eye health, then that child should receive a separate referral form to have a comprehensive eye exam.**
Disclaimer
While the above protocol seeks to provide a uniform/standardized methodology to conduct vision screenings within the Our Children’s Vision campaign, the locally adopted protocol should consider, integrate or adapt it to formal/legal in-country protocols and legislative processes.
Dear Sir/Madam

Please note that ___________________________ was screened at ___________________ on __/__/___ (date).

This child is being referred due to problems noted on one of the following areas ticked below:

Vision
Eye health
Symptoms

Please provide a comprehensive eye examination to determine what is required by this patient.

Referred by: ____________________________

Please print name