The Vision Screening Battery

Over a half a million Michigan children had their vision screened during fiscal year 2008-9, of which over 10% of these same children were referred to an eye care practitioner. Follow-up studies from previous years have indicated that of the number referred, between 80 and 90% are diagnosed with an eye problem requiring treatment.

Local Health Departments, in cooperation with the Michigan Department of Community Health (MDCH), conduct vision screening programs for pre-school (ages 3-5) and school-age children at regular intervals (grades 1, 3, 5, 7, 9). The screening battery is administered by vision technicians who have been trained by MDCH following the Public Health Code and the Minimum Program Requirements for vision screenings.

The screening battery is in no way meant to be diagnostic. A failure of one or more tests in a screening or an observable symptom results in a referral and may or may not be indicative of an eye problem requiring treatment. Since September 1, 2000, all county health department vision technicians have included the two-line difference test with both the pre-school and school age vision screening batteries. Referral is based upon the failure of one or more tests in the screening battery.

**REFERRAL CRITERIA: PRE-SCHOOL (AGES 3-5) AND KINDERGARTEN CHILDREN** (Using the Spectrum Pediatric Screener or Pediatric Vision Cards)

**VISUAL ACUITY TEST**
- inability to correctly read at least 4 of 6 Snellen symbols at 20/40 with both the R and L eyes

**TWO-LINE DIFFERENCE TEST**
- inability to correctly read at least 4 out of 6 Snellen E symbols at 20/25 with only one eye after having read correctly 4,5 or 6 Snellen E symbols at 20/40 with both the right and left eyes

**CORNEAL REFLECTION TEST**
- reflection is centered on one pupil and on the edge or off center of the other pupil.

**ALTERNATING COVER/UNCOVER TEST**
- definite monocular movement or shift of eye is observed at near or far distances.

**REFERRAL CRITERIA: SCHOOL AGE CHILDREN (GRADES 1-9)**
(Using approved Titmus or Optec screening methods)
VISUAL ACUITY TEST
- inability to correctly read at least 4 of 6 Snellen E symbols at 20/30 with both the R and L eyes

TWO-LINE DIFFERENCE TEST
- inability to correctly read at least 4 of 6 Snellen E symbols at 20/20 with only one eye after having correctly read 4, 5 or 6 of the Snellen symbols at 20/30 with both eyes

PLUS LENS TEST
- ability to correctly read at least 4 of 6 Snellen E symbols at 20/20 with either eye while using a +1.75D plus sphere lens

PHORIA TEST

<table>
<thead>
<tr>
<th>Far Point (20 feet)</th>
<th>Near Point (Reading Distance) – Grade 9 only</th>
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</thead>
<tbody>
<tr>
<td>Hyperphoria</td>
<td>1.5 prism diopters</td>
</tr>
<tr>
<td>Esophoria</td>
<td>6 prism diopters</td>
</tr>
<tr>
<td>Exophoria</td>
<td>4 prism diopters</td>
</tr>
</tbody>
</table>

OBSERVABLE SYMPTOMS
The observation of any one of the following symptoms is a referral for care:

- Unequal pupils
- Droopy eyelid(s)
- Crossed Eyes
- Rapid eye movements