

Distance Visual Acuity Screening - LEA SYMBOLS[®]/HOTV Flip Chart

Ages

3 years through 5 years.

Purpose

To check the visual acuity of children who do not know the alphabet or have difficulty with the LEA SYMBOLS[®] or HOTV wall chart.

Description

Visual acuity is screened at a distance of 10-feet using the Massachusetts Visual Acuity Flip Chart with age-appropriate optotypes (symbols or letters) and a response card. The child can point to an optotype on the response card matching the one the screener is indicating on the flip chart. The child need not know the names of the optotypes.

Equipment

- LEA SYMBOLS[®] or HOTV Massachusetts Visual Acuity Flip Chart.
- LEA SYMBOLS[®]/HOTV Response Key Card and LEA SYMBOLS[®]/HOTV Flash Cards.
- Occluder glasses for right and left eyes.
- Table and chairs (optional).

Screener Qualifications

Can be performed by screeners who have received the recommended training by the Minnesota Department of Health or equivalent. Refer to Assessment Tools on the [Vision Screening Forms, Tools and Materials webpage \(www.health.state.mn.us\)](http://www.health.state.mn.us).

Facilities

Room at least 12 feet long or greater, well-lit, without glare and free of distractions.

Procedure

1. Pre-condition the child to the process of screening by pointing to several optotypes on the flip chart and having the child say or match the optotypes on the response card.
2. Position the child with their eyes at a 10 foot distance from the card (foot arches should be positioned on the 10 foot line if standing; the child's eyes should be positioned on the 10 foot line if sitting).
3. If the child wears corrective lenses or contacts, these should be clean and worn during the screening procedure. Position the occluder over the eyeglasses.
4. Screen the **RIGHT** eye, occlude the **LEFT** eye.
 - Start with the 10/40 page and proceed to the 10/32, 10/25, 10/20 and 10/16, 10/12.5, 10/10, 10/8 pages as long as the child is able to match one optotype on each page.
 - If the child misses an optotype, go to the preceding page and point to one optotype at a time. If the child matches four of them correctly, proceed to the next page.
 - To receive credit for a page, the child must correctly match any 4 out of 5 optotypes on that page.
5. To screen the **LEFT** eye, occlude the **RIGHT** eye.
 - Repeat the procedure.
6. Record the visual acuity number as the last page that the child can correctly identify any 4 of 5 optotypes.

PASS

Must be able to correctly identify any 4 out of the 5 optotypes on the critical passing line for age or better without a difference of two lines or more between the eyes in the PASS range.

Age 3 years

- 10/25 (20/50) or better in each eye without a difference of two lines or more between the eyes.

Age 4 years

- 10/20 (20/40) or better in each eye without a difference of two lines or more between the eyes.

Age 5 years

- 10/16 (20/32) or better in each eye without a difference of two lines or more between the eyes.

REFER/Rescreen Criteria

The majority of children who do not meet passing criteria will be referred.

Some children may need rescreening. Rescreening should be performed if a child was unable to follow instructions, was overly distracted during the screening or was unable to complete the initial screening. Rescreening should occur as soon as possible but in no case later than 6 months from the initial screening date.

For more information on rescreening criteria, refer to the section on [Rescreening Untestable Children \(www.health.state.mn.us\)](http://www.health.state.mn.us).

Please note: children who resist having their eye covered during screening should be suspected of having vision loss in the uncovered eye, rather than being uncooperative, and should be referred.

REFER

Age 3 years

- 10/32 (20/60) or worse in either eye or a difference of 2 lines or more between the eyes in the PASS range.

Age 4 years

- 10/25 (20/50) or worse in either eye or a difference of 2 lines or more between the eyes in the PASS range.

Age 5 years

- 10/20 (20/40) or worse in either eye or a difference of 2 lines or more between the eyes in the PASS range.

Considerations for Screening Special Populations

The matching of the LEA SYMBOLS® or HOTV letters may be practiced before the screening. For some children with special needs, it may be useful to reproduce the response card, cut and space optotypes to allow for larger movements when matching the symbol.

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651-201-3650.*