

Binocular Fix and Follow

Ages

4 months through 3 years or when visual acuity can be measured.

Purpose

To check the movement of both eyes while following a continuously moving target.

Description

Target is moved horizontally, then vertically, then obliquely in relation to a center point on a visual axis of each eye. Make sure the child's head does not move; the parent can help steady the child.

Equipment

Penlight or interesting target.

Screening 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

A well-lit room, free of distractions.

Procedure

Perform the procedure in the following fields:

Horizontal

1. Hold the target 14-16 inches away, centered in front of the child's eyes (center point) and slowly move the target horizontally to your right until the child's eyes are in their extreme left viewing position.
2. Slowly move the target to your left, crossing the center point and continuing until the eyes are in the extreme right viewing position
3. Return target to center point.

Vertical

1. Start at the center point, raise the target until the eyes reach the extreme up viewing position.
2. Lower the target through the center point until the eyes reach the extreme down viewing position.
3. Return target to center point.

Oblique

1. Start at the center point, raise the target until the eyes reach the extreme upper right viewing position.
2. Lower the target through the center point until the eyes reach the extreme lower left viewing position.
3. Return target to center point.
4. Repeat this procedure for the upper left to the lower right viewing position.
5. Return target to center point.

Convergence

Defined as the simultaneous inward movement of both eyes to maintain binocular vision

1. Starting at the center point, move the target slowly toward the child to a distance of 4 inches.

PASS

Both eyes follow the target easily and smoothly.

Re-screen/REFER

Eyes do not follow in unison or movements are jerky, uneven, or "break" further than 4 inches from the bridge of the nose, or child uses head movements. Eye crossing is fixed and/or intermittent.

Minnesota Department of Health
Child and Teen Checkups
651-201-3650
health.childteencheckups@state.mn.us
www.health.state.mn.us

01/2022

*To obtain this information in a different format, call:
651-201-3650.*