

Hearing and Vision Screening

QUICK REFERENCE GUIDE

Screeners who have completed the recommended training by the Minnesota Department of Health or equivalent can perform the following procedures, unless otherwise indicated.

Hearing screening procedures

For more information, refer to the [Hearing Screening Training Manual \(www.health.state.mn.us\)](http://www.health.state.mn.us)

1. Family and individual history (all ages)
 - ✓ Joint Commission on Infant Hearing risk factors reviewed with parent/caregiver – positive response indicates need for referral
 - ✓ Observation of behavior and symptoms by parent/caregiver/teacher/child
 - ✓ Risk of noise-induced hearing loss for ages 11 through 20 years
2. Visual inspection (all ages)
 - ✓ External structures
 - ✓ Internal structures (by otoscopic exam)*
3. Pure tone audiometry (3 years through 20 years)
 - ✓ Play audiometry may be more effective for 3 and 4 year-olds
 - ✓ Include screening at 6000 Hz at 20 dB when screening youth ages 11 and older
4. Otoacoustic Emissions (OAE) or Auditory Brainstem Response (ABR)* for children up to 3 years of age
5. Tympanometry

* Advanced level skills/screening; ABR requires referral to audiologist

Required/recommended ages

Child and Teen Checkups

- ✓ Newborn Hearing and Screening result on file; follow up if not done or not passed
- ✓ Risk assessment: Birth through age 3; risk and history updates through age 20.
- ✓ Pure tone audiometry: Recommended at 3 years; required annually between ages 4 and 10 and once between the ages of 11 through 14 years, once between the ages of 15 through 17 years, and once between the ages of 18 through 20 years

School

- ✓ Pure tone audiometry: Early Childhood Screening required once between ages 3 through 5 years
- ✓ Pure tone audiometry recommended for grades K, 1, 2, 3, 5, 8, and 11

PASS Criteria for pure tone audiometry: Responds to all age-appropriate tones in each ear

Equipment needed

- ✓ Pure tone audiometer for ages 3 and older
- ✓ Small bucket and toys if screening by play audiometry
- ✓ Otoscope with insufflator bulb for internal inspection
- ✓ Optional: tympanometer, otoacoustic emissions (OAE) equipment

Vision screening procedures

For more information, refer to the [Vision Screening Procedures for Infancy, Childhood, and School Age Children manual \(www.health.state.mn.us\)](http://www.health.state.mn.us)

1. Vision history and risk assessment (all ages)
 - ✓ Concerns about eyes: complaints or unusual visual behavior demonstrated
 - ✓ Family history of significant visual problems
2. External inspection and observation (all ages)
3. Binocular fix and follow (4 months through 3 years, or when visual acuity can be measured)
4. Corneal light reflex (all ages)
5. Unilateral cover test – at near (6 months through 20 years)
6. Unilateral cover test – at distance (3 years through 20 years)
7. Stereo visual acuity (Optional; 3 years through 8 years)
8. Color vision (kindergarten males)
9. Distance visual acuity (3 years through 20 years)
10. Near visual acuity – plus lens (5 years through 20 years)
11. Instrument-based vision screening (alternate format for screening children 3 through 5 years)
12. Pupillary light response (all ages)*
13. Retinal (red light) reflex (all ages)*

*Advanced level skills/screening; should be performed by healthcare provider or (RN/PHN)

Required/recommended ages

Child and Teen checkups:

- ✓ Risk assessment and exam as indicated in the vision screening procedures
- ✓ Visual acuity screening required annually from age 3 through 10 years and once between the ages of 11 through 14 years, once between the ages of 15 through 17 years, and once between the ages of 18 through 20 years

Schools:

- ✓ Early Childhood Screening required once between the ages of 3 through 5 years
- ✓ Visual acuity screening recommended for grades 1, 3, 5, 7, and 10

PASS criteria for visual acuity screening

Age 3 years: 10/25 (20/50) or better in each eye without a difference of two lines or more between the eyes in the pass range

Age 4 years: 10/20 (20/40) or better in each eye without a difference of two lines or more between the eyes in the pass range

Age 5 years and older: 10/16 (20/32) or better in each eye without a difference of two lines or more between the eyes in the pass range

Equipment needed

For more information on equipment, refer to [Equipment for Visual Acuity Screening \(www.health.state.mn.us\)](http://www.health.state.mn.us)

- ✓ 10- foot LEA SYMBOLS® or HOTV wall charts or flip charts (3 through 5 years)
- ✓ 10- foot Sloan wall chart (6 years and older)
- ✓ Occluder glasses, temporary occlusion eye patches, or micro-pore tape (3 through 9 years)
- ✓ Plastic occluders with lip or spectacle occluders (10 years and older)
- ✓ +2.50 glasses, also known as reading glasses or cheaters (5 years and older)