



Michigan Early Hearing Detection and Intervention Program

Risk Indicators Associated with Permanent Congenital, Delayed-Onset, or Progressive Hearing Loss in Childhood:

Excerpt from: Joint Committee on Infant Hearing Year 2007 Position Statement: Principles and Guidelines for Early Hearing Detection and Intervention Programs.

Risk indicators that are marked with an "*" are of greater concern for delayed-onset hearing loss.

- Caregiver concern* regarding hearing, speech, language, or developmental delay.
- Family history* of permanent childhood hearing loss.
- Neonatal intensive care of more than 5 days or any of the following regardless of length of stay: ECMO*, assisted ventilation, exposure to ototoxic medications (gentamicin and tobramycin) or loop diuretics (furosemide/Lasix), and hyperbilirubinemia that requires exchange transfusion.
- In utero infections, such as CMV*, herpes, rubella, syphilis, and toxoplasmosis. Craniofacial anomalies, including those that involve the pinna, ear canal, ear tags, ear pits, and temporal bone anomalies.
- Physical findings, such as white fore lock that are associated with a syndrome known to include a sensorineural or permanent conductive hearing loss.
- Syndromes associated with hearing loss or progressive or late-onset hearing loss*, such as neurofibromatosis, osteopetrosis, and Usher syndrome; other frequently identified syndromes include Waardenburg, Alport, Downs, Pendred, and Jervell and Lange-Nielson.
- Neurodegenerative disorders*, such as Hunter syndrome, or sensory motor neuropathies, such as Friedreich ataxia and Charcot-Marie-Tooth syndrome.
- Culture-positive postnatal infections associated with sensorineural hearing loss, including confirmed bacterial and viral (especially herpes viruses and varicella) meningitis.
- Head trauma*, especially basal skull/temporal bone fracture that requires hospitalization.
- Chemotherapy*

*Because some important indicators such as family history of hearing loss may not be determined during the course of Universal Newborn Hearing Screening, the presence of all risk factors for acquired hearing loss should be determined in the MEDICAL HOME during early well-infant visits. Early and more frequent assessment may be indicated for children with CMV infection, syndromes associated with progressive hearing loss, neurodegenerative disorders, trauma, or culture-positive postnatal infections associated with sensorineural hearing loss, for children who have received ECHMO or chemotherapy and when there is a caregiver concern or a family history of hearing loss. All infants with and without risk indicators for hearing loss should be monitored during routine medical care consistent with the American Academy of Pediatrics periodicity schedule for development milestones, hearing skills, and parent or caregiver concerns about hearing speech and language skills.