Iowa's Early Hearing Detection and Intervention Program

Risk Factors Associated with Childhood Hearing Differences

Regardless of previous hearing-screening outcomes, all infants with or without risk factors should receive ongoing surveillance of communicative development beginning at 2 months of age during well-child visits in the medical home (AAP Committee, 2017). Should a parent have concern regarding speech, language, developmental delay or developmental regression, an immediate referral should be made to an audiologist and speech-language pathologist for further evaluation.

The Iowa EHDI program developed a high risk monitoring protocol and guidelines based on the Joint Committee on Infant Hearing 2019 position statement, http://www.jcih.org/posstatemts.htm

A mother plus Zika and infant with lab evidence of Zika plus/minus clinical findings should have an AABR by 1 month and ABR by 4-6 months or VRA by 9 months.

A child should be seen by a pediatric audiologist for a hearing evaluation no later than **three months** after the occurrence if one or more of the following risk factors are present:

- Confirmed bacterial and viral meningitis (especially herpes viruses and varicella) or encephalitis
- Congenital Cytomegalovirus (CMV) confirmed in infant
- Extra-corporeal membrane oxygenation (ECMO)
- Significant head trauma (especially basal skull/temporal bone fracture)
- Chemotherapy

A child should see an audiologist for a hearing evaluation by **nine months** of age if one or more of the following risk factors are present in the period immediately before or right after birth.

- Family history of early, progressive, or delayed hearing loss
- Craniofacial anomalies (includes cleft lip or palate, microtia (abnormally small ear), atresia (blocked or abnormally small ear canal), ear dysplasia, microphthalmia, white forelock, congenital microcephaly, congenital or acquired hydrocephalus, or temporal bone abnormalities
- Hyperbilirubinemia with exchange transfusion regardless of length of stay
- NICU stay longer than five days
- Aminoglycoside (includes: Gentamycin, Vancomycin, Kanamycin, Streptomycin, Tobramycin) administered for more than five days (toxic levels or with known genetic susceptibility)
- In utero infections such as herpes, rubella, syphilis, and toxoplasmosis
- Asphyxia or Hypoxic Ischemic Encephalopathy
- Syndromes (includes: Trisomy 21-Down syndrome, Goldenhar, Pierre Robin, CHARGE association, Rubinstein-Taybi, Stickler, Usher, Osteopetrosis, Neurofibromatosis type II, Treacher Collins, Hunter syndrome, Friedreich's ataxia, Charcot-Marie-Tooth syndrome or visit the Hereditary Hearing Loss website)