

Table 1. Risk factors for early childhood hearing loss.

	Risk Factor Classification	Recommended Diagnostic Follow-up	Monitoring Frequency
	Perinatal		
1	Family history* of early, progressive, or delayed onset permanent childhood hearing loss	by 9 months	Based on etiology of family hearing loss and caregiver concern
2	Neonatal intensive care of more than 5 days	by 9 months	As per concerns of on-going surveillance of hearing skills and speech milestones
3	Hyperbilirubinemia with exchange transfusion regardless of length of stay	by 9 months	
4	Aminoglycoside administration for more than 5 days**	by 9 months	
5	Asphyxia or hypoxic ischemic encephalopathy	by 9 months	
6	Extracorporeal membrane oxygenation (ECMO)*	no later than 3 months of occurrence	Every 12 months to school age or at shorter intervals based on parent or provider concerns
7	In utero infections, such as herpes, rubella, syphilis toxoplasmosis	by 9 months	As per concerns of on-going surveillance
	In utero infection with cytomegalovirus (CMV) with clinical presentation*	no later than 3 months of occurrence	Every 6 months to age 3, annually to age 6 or at shorter intervals based on parent or provider concerns
	Mother + Zika and infant with no laboratory evidence and no clinical findings	standard	As per AAP Periodicity schedule or parent concerns
	Mother + Zika and infant with laboratory evidence of Zika + clinical findings Mother + Zika and infant with laboratory evidence of Zika - clinical findings	ABR by 1 month ABR by 1 month	ABR by 4-6 months; monitor as per AAP Periodicity ^a Consider ABR by 4-6 months or VRA by 9 months; monitor as per AAP Periodicity ^a
8	Certain birth conditions or findings: <ul style="list-style-type: none"> • Craniofacial malformations including microtia/atresia, ear dysplasia, oral facial clefting, white forelock, and microphthalmia • Congenital microcephaly, congenital or acquired hydrocephalus • Temporal bone abnormalities 	by 9 months	As per concerns of on-going surveillance of hearing skills and speech milestones
9	Currently, over 400 syndromes have been identified. To check the association of hearing loss with certain birth conditions, visit the Hereditary Hearing Loss website. ^b	by 9 months	According to natural history of syndrome or concerns

Note: Adapted from Table 1 in the 2019 JCIH Position Statement.

AAP = American Academy of Pediatrics; ABR = auditory brainstem response; VRA = visual reinforcement audiometry

* Infants at increased risk of delayed onset or progressive hearing loss

**Infants with toxic levels or with a known genetic susceptibility remain at risk

^a Adebajo T, Godfred-Cato S, Viens L, et al. Update: interim guidance for the diagnosis, evaluation, and management of infants with possible congenital Zika virus infection—United States, October 2017. *MMWR Morb Mortal Wkly Rep.* 2017;66(41):1089-1099.

^b Hereditary Hearing Loss homepage. <http://hereditaryhearingloss.org/>