

JCIH 2019 Position Statement Frequently Asked Questions

→ Medical Considerations **→**

Q: I noticed that specifying ear tags and pits as a risk factor for follow-up was eliminated from the 2019 statement. Do you have any additional insight on this, specifically if the committee still recommends follow-up for these babies when they pass the NHS and what that timeline should be?

A: Isolated ear pits and tags have no higher reported incidence of hearing loss than other children (without ear pits and tags). The committee based their recommendations off papers such as <u>"Isolated preauricular pits and tags: is it necessary to investigate renal abnormalities and hearing impairment" (2008). The main finding was that the prevalence of hearing loss and renal problems were similar to a control group without tags or other pinna anomalies. There is a similar recommendation from a 2017 paper, <u>"Is routine audiometric testing necessary for children with isolated preauricular lesions (2017)</u>).</u>

The committee recognizes that programs may institute guidelines that are stricter than what is recommended in the current statement. There remains a lack of conclusive evidence that children with isolated external ear anomalies require additional care beyond universal newborn hearing screening.

- Firat, Y., Şireci, Ş., Yakıncı, C. *et al.* Isolated preauricular pits and tags: is it necessary to investigate renal abnormalities and hearing impairment?. *Eur Arch Otorhinolaryngol* **265**, 1057–1060 (2008). https://doi.org/10.1007/s00405-008-0595-y
- Grace T. Wu, Conor Devine, Allen Xu, Katie Geelan-Hansen, Samantha Anne. Is routine audiometric testing necessary for children with isolated preauricular lesions?, International Journal of Pediatric Otorhinolaryngology, Volume 93, 2017, Pages 68-70, ISSN 0165-5876, https://doi.org/10.1016/j.ijporl.2016.12.032.

Q: What about assisted ventilation? Is this still considered a risk factor for possible delayed HL? If so, what type(s) of devices are considered assisted ventilation?

A: The literature has supported the association of assisted ventilation to be an independent risk factor on hearing status (Hille et al 2007). The literature does not specifically describe the type of assisted ventilation.

Q: What is considered a 'prolonged stay in the NICU' and how are recommendations different for babies in a Special Care Nursery versus a NICU?

A: The definition of prolonged stay in the NICU is greater than 5 days (Table 1, risk factor 2). The rationale for including a prolonged stay in the NICU is related to literature findings that those who have been in the NICU has a higher rate of hearing loss as compared to the general population among populations of NICU graduates (Hille et al 2007, Coenraad et al 2010, Kraft 2014). Additionally, some authors have tried to tease apart the multiple potential risk factors associated with hearing loss (such as ECMO and needing ventilation) {Kraft 2014}.

It is most likely a compilation of multiple risk factors within NICU babies that prompt this high rate of hearing loss. Using the risk factor of NICU stay provides a readily identifiable event to ensure clinicians and public health systems can identify and monitor a specific child for late onset hearing loss. Considerations for babies in the special care nursery should be individualized for the infant based on specific risk factors.

- Hille ET, Van Straaten HI, and Verkerk PH. Prevalence and independent risk factors for hearing loss in NICU infants. *Acta Paediatr*. 2007;96, 1155-1158.
- Kraft CT, Malhotra S, Boerst A, and Thorne MC. Risk indicators for congenital and delayed-onset hearing loss. *Otol Neurotol.* 2014;35, 1839-1843.
- Coenraad S, Goedegebure A, Van Goudoever JB, and Hoeve LJ. Risk factors for sensorineural hearing loss in NICU infants compared to normal hearing NICU controls. *Int J Pediatr Otorhinolaryngol*. 2010;74, 999-1002.