Hearing Loss Comorbidities: A Childhood Timeline

CONGENITAL HEARING LOSS

The Joint Commission on Infant Hearing recommends hearing screening by one month, diagnostic evaluation by three months, and early intervention by six months to facilitate identification and treatment of hearing loss in infants.¹

Children identified with hearing loss before six months have better language outcomes than children who are identified after six months.^{2,3} These effects can be seen in children as old as 3 years or older.³

EAR INFECTIONS IN TODDLERHOOD

Transient hearing loss is common in toddlers and young children.⁵ It is typically associated with middle-ear dysfunction that can be active ear infections or noninfected middle ear fluid.

Long-term untreated middle-ear dysfunction can impact hearing and ultimately impact speech and language development.^{6,7}

AAO (2016) recommends an age-appropriate hearing evaluation for any child experiencing otitis media that persists for three months or longer.⁹

NOISE EXPOSURE

12.5% of 6 to 19-year-olds (6.8 million) and 16.8% of 12 to 19-year-olds (5 million) in the United States have documented evidence of elevated hearing thresholds directly attributed to noise exposure.¹⁰

Teens are exposed to dangerous levels of sounds in many different ways. Ask your patients about recreational noise exposure including use of personal music devices. The Academy recommends wearing hearing protection when around sounds louder than 85 dB.



1 month 3 months 6 months

1 year

11 years

12 years

19 years

Infants

Congenital cytomegalovirus (CMV) is estimated to cause 15–25% of congenital sensorineural hearing loss.⁴

Toddlers to Pre-Teens

Certain infections, anatomical abnormalities, and genetic conditions can be associated with late-onset or progressive hearing loss.⁹

Children of all ages and developmental status can have their hearing tested. No child is too young. There is a test to accommodate all abilities.

Teens & Young Adults

Noise-induced hearing loss is not reversible, but is preventable. Talk to your patients about wearing hearing protection, turning down the volume, and walking away from loud noises.

Connect with an Audiologist Near You!

NAME, DEGREE CITY, STATE PHONE | EMAIL WEBSITE



Endnotes

- 1. Joint Committee on Infant Hearing. (2007) Position Statement: Principles and Guidelines for Early Hearing Detection and Intervention Programs. www.jcih.org/default.htm
- 2. Moeller M. (2000) Early intervention and language development in children who are deaf and hard of hearing. *Peds* 106(43). http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.538.1453&rep=rep1&type=pdf.
- 3. Yoshinaga-Itano C, Sedey A, Wiggin M, Chung W. (2017) Early hearing detection and vocabulary of children with hearing loss. *Peds*140(2). www.ncbi.nlm.nih.gov/pmc/articles/PMC5595069.
- 4. Rawlinson WD et al. (2018) Neonates with congenital Cytomegalovirus and hearing loss identified via the universal newborn hearing screening program. *J Clin Virol* 102:110–115. www.ncbi.nlm.nih.gov/pubmed/29571077.
- 5. Engel J, Anteunis L, Volovics A, Hendriks J, and Marres E. (1999) Prevalence rates of otitis media with effusion from 0 to 2 years of age: healthy-born versus high-risk-born infants. *IJPORL* 47:243–251. www.ncbi.nlm.nih.gov/pubmed/10321779.
- 6. Shriberg LD, Flipsen P, Thielke H, Kwiatowski J, Kertoy MK, Katcher ML. (2000) Risk for speech disorder associated with early recurrent otitis media with effusion: Two retrospective studies. *J Speech Lang Hear Res* 43. 79–99. https://jslhr.pubs.asha.org/article.aspx?articleid=1781415.
- 7. Anteunis LJC, Engel JAM, Chenault MN, Manni JJ. (2000) Language outcome at the age of 27 months and the influence of early life otitis media with effusion. In Anteunis LJC, Engel JAM, *Maastricht Otitis Media with Effusion Study: A Prospective Longitudinal Study in Infants from 0 to 2 years*. Maastricht: The Netherlands Datawyse. https://onlinelibrary.wiley.com/doi/pdf/10.1046/j.1365-2273.1999.00281.x.
- 8. Rosenfeld RM et al. (2016) Clinical Practice Guideline: Otitis Media with Effusion (Update). *Otolaryngol Head Neck Sur* 154:S1–S41. www.entnet.org/content/clinical-practice-guideline-otitis-media-effusion-ome.
- 9. Syndromic hearing loss. Boystown National Research Hospital. www.babyhearing.org/syndromic-genetic.
- 10. Henderson E, Testa M, Hartnick C. (2011) Prevalence of noise-induced hearing-threshold shifts and hearing loss among US youths. *Peds* 127(1). http://pediatrics.aappublications.org/content/127/1/e39.long.

Resources

Dangerous Decibels. http://dangerousdecibels.org.

National Center for Hearing Assessment and Management. www.infanthearing.org.