

The Ear is the Doorway to the Brain. We Hear With our Brain

(Carol Flexer)

Hearing loss and the brain:

- Typical hearing infants begin to hear before they are born, at 20 weeks gestation.
- The most important time for brain growth is from birth until approximately three years of age, and that time cannot be made up later.
 - o Those early years are when the most rapid changes happen in the brain.
- Without proper early identification and intervention the baby's brain misses out on typical development of the auditory brain pathways.

It's in the numbers:

- Normal hearing children hear 45 million words by age 4.
- A typical hearing baby listens for about 10 hours a day. That equals to 3,650 listening hour per year.
 - o If a baby wears hearing aids for only 3 hours a day it will take over 3 years to give the baby the same listening experience as a hearing baby.
 - o Even with hearing aids children with hearing loss have difficulty hearing from a distance and that makes it harder to overhear and pick up information incidentally.
 - o Babies with hearing loss require *three times* the exposure to words and concepts than their typically hearing peers.
(Supporting Success for kids with hearingloss.com)
- Children need to listen for 20,000 hours before they are ready to read.

Positive Outcomes:

- Only through concerted effort on the part of families, can children with permanent hearing loss catch up and learn language at a rate similar to children without hearing loss.
- *Regardless of the family's choice of communication mode, the key to children's communication development depends on intensive language exposure as early as possible.* (Supporting Success for kids with hearingloss.com).
- Outcomes for young children and their families are better when providers have specialized training specific to working with infants and toddlers who are D/HH and their families
(www.pediatrics.org/cgi/doi/10.1542/peds2013-0008)