# Did you know?

1 to 3 in every 1,000 babies born have a hearing loss.



Early identification and assessment are the first steps in helping a child with a hearing impairment. If you have a concern about your infant's hearing and speech development, please contact the:

#### **Guam EHDI Project**

Center for Excellence in Developmental Disabilities Education, Research, & Service (Guam CEDDERS) University of Guam Office of Academic & Student Affairs UOG Station Mangilao, Guam 96923

> Phone: 735-2466 TDD/TTY: 734-6531 Fax: 734-5709

Email: nenehearing@guamehdi.org

Website: www.guamehdi.org





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## Hearing and Speech Development





Many factors may influence your baby's ability to communicate. One of the major factors is whether he/she can hear typical speech and language.

Finding out as early as possible if a child has a hearing loss can make a big difference in a child's language and cognitive development.

This brochure provides information on milestones or what to expect with typical hearing and speech development for infants and toddlers, birth to 24 months old. If your child is not showing the actions that are noted here for certain ages, it is recommended that you inform your health care provider so that tests could be conducted to determine whether a hearing loss is present.

Help your baby develop good communication skills through early detection of hearing loss!

#### Milestones of Normal Hearing and Speech Development

#### **Birth - 4 months**

- Stops movement or quiets in response to speech.
- Startles to loud sounds. Moves eyes toward sound source.
- Arouses from light sleep to sudden loud noises.

#### 4 - 7 months

- Begins head turn toward sounds and voices out of sight (4 months) and turns head directly toward the sound source (7 months).
- Smiles in response to speech. Looks in response to own name.
- Babbling begins.

#### 7 - 9 months

- Turns to find a sound source that is out of sight.
- Gurgles or coos to sounds out of sight.
- Uses intonation patterns heard in speech.
- Comprehends "no." Babbles in multiple syllables.

#### 9 - 12 months

- Acquires first true word. Imitates sounds.
- Looks at a common object when named.
- Responds to music.
- Understands simple commands.

#### 13 - 18 months

- Uses sentence-like intonation.
- Perceives emotions of others.
- Uses 3 20 words.
- Uses all vowels and consonants in jargon.

#### 19 - 24 months

- Uses more words than jargon.
- Asks question by rising intonation at end of phrase.
- Comprehends about 300 words.
- Uses about 50 words.
- Produces animal sounds.
- Combines two words into phrases.
- Listens to simple stories.

If your baby does not do the activities listed for his/her age, he/she may have a hearing loss.

### **Types of Hearing Loss**

#### **Conductive Hearing Loss**

This type of hearing loss occurs when sound is not conducted efficiently through the outer ear canal to the eardrum and the tiny bones of the middle ear. It usually involves a reduction in sound level or the ability to hear faint sounds. This type of hearing loss can often be medically or surgically corrected.

#### **Sensorineural Hearing Loss**

This type of loss happens when there is damage to the inner ear (cochlea) or to the nerve pathways from the inner ear (retro cochlear) to the brain. This type of loss involves a reduction in sound level and the ability to hear faint sounds, and also affects the ability to hear clearly and understand speech.

#### **Mixed Hearing Loss**

Sometimes a conductive hearing loss occurs in combination with a sensorineural hearing loss. This means that there may be damage in the outer or middle ear and in the inner ear (cochlea) or auditory nerve.

