



H.E.A.R.

Hierarchy of Early Auditory Responses

Hearing Age In Months	AWARENESS OF SOUND	SOUND SOURCE LOCALIZATION	SOCIAL RESPONSES	COMPREHENSION	IMITATION	VOCALIZATIONS/ VERBALIZATIONS
0-3 months	<ul style="list-style-type: none"> : Responds to voices* : Responds to environmental sounds 	<ul style="list-style-type: none"> : Searches for sound* : Turns head toward sound 	<ul style="list-style-type: none"> : Watches speaker's face : Reacts to familiar voice of caregiver 	<ul style="list-style-type: none"> : Quiets to a familiar voice : Reacts differently to angry and friendly voices* 		<ul style="list-style-type: none"> : Vocalizes with some vowels sounds and/or sounds in back of throat
3-6 months	<ul style="list-style-type: none"> : Responds to sound-making toys and music* : Shows excitement to familiar sounds* : Quiets when sound is presented : Attends to spoken language 	<ul style="list-style-type: none"> : Turns eyes toward sound : Turns head toward voice : Locates the sound* 	<ul style="list-style-type: none"> : Waits for adult to take his or her turn* : Attends to social play* : Laughs out loud 	<ul style="list-style-type: none"> : Anticipates routine activities* : Responds to "no" half of the time 	<ul style="list-style-type: none"> : Imitates own noises as he or she hears them* 	<ul style="list-style-type: none"> : Uses extreme pitch changes* : Vocalizes consonants: m, p, b : Babbles simple syllables*
6-9 months	<ul style="list-style-type: none"> : Responds to sound when source is not visible : Responds to name in moderately noisy environment 	<ul style="list-style-type: none"> : Locates sound side to side at ear level* : Turns eyes and head toward sound of hidden voice : Locates sound side to side and indirectly below* 	<ul style="list-style-type: none"> : Maintains attention to speaker : Turns immediately to caregiver's voice across the room : Changes pitch/volume to signify intensity of desires : Vocalizes to music and singing* 	<ul style="list-style-type: none"> : Responds to verbal requests* : Understands a few words* : Identifies own name and family members' names : Responds to requests with natural gestures* 	<ul style="list-style-type: none"> : Imitates: cough, tongue click, kisses : Imitates pitch and duration when imitated by a caregiver* : Repeats sounds just made when imitated by a caregiver* : Imitates duplicated syllables* 	<ul style="list-style-type: none"> : Vocalizes duplicated syllables* : Vocalizes intonation patterns, vocal play : Vocalizes along with pointing to get what he/she wants : Vocalizes at least 4 different syllables*
9-12 months	<ul style="list-style-type: none"> : Moves physically to rhythms, music, singing : Recognizes and responds appropriately to familiar sounds 	<ul style="list-style-type: none"> : Locates sound side to side and directly below* 	<ul style="list-style-type: none"> : Repeats sounds when attention is given from others : Plays reciprocal games* : Frowns when scolded 	<ul style="list-style-type: none"> : Attends to objects mentioned during conversation : Looks for named objects that are out of sight : Performs routine activities upon verbal request* : Identifies 2 body parts on self 	<ul style="list-style-type: none"> : Imitates new gestures with vocalizations* : Imitates names of familiar objects/actions* : Imitates consonant and vowel combinations 	<ul style="list-style-type: none"> : Jargons using familiar intonation patterns* : Vocalizes a desire for a change in activity : Spontaneously says first words (1-3)
12-15 months	<ul style="list-style-type: none"> : Attends to new sounds and words : Interested in environmental noises beyond his or her immediate surroundings* 	<ul style="list-style-type: none"> : Locates sound side to side, below and indirectly above* 	<ul style="list-style-type: none"> : Uses exclamatory expressions during play* : Identifies rhymes/songs upon hearing* 	<ul style="list-style-type: none"> : Points to 2 action words in pictures : Follows one step commands during play : Identifies simple phrases and questions with key words* : Develops receptive vocabulary of about 50 words 	<ul style="list-style-type: none"> : Responds to request to imitate words* : Imitates most new one-syllable words : Imitates familiar two-syllable words with syllable changes* : Imitates at least three animal sounds 	<ul style="list-style-type: none"> : Produces all vowels : Produces at least 4 consonants: m, p, b, d, h : Says words along with gestures : Spontaneously says 8-10 words
15-18 months	<ul style="list-style-type: none"> : Attends to rhymes and songs for at least 2-3 minutes 	<ul style="list-style-type: none"> : Locates sound directly to side, below and above* : Locates sound directly at any angle* 	<ul style="list-style-type: none"> : Finds familiar objects not in sight when asked : Greets familiar people with an appropriate verbalization : Attempts to sing songs with words : Follow 2 requests with one object during play 	<ul style="list-style-type: none"> : Points to 6 body parts when asked : Identifies 2 objects from a group of familiar objects or pictures when named : Follows directions using prepositional phrases* : Develops receptive vocabulary of 150 – 200 words 	<ul style="list-style-type: none"> : Imitates sounds heard in the environment* : Imitates words overheard in conversation : Begins to imitate two-word phrases* : Echoes prominent or last word heard 	<ul style="list-style-type: none"> : Produces diphthongs* : Spontaneously links some words together : Produces additional consonants such as: t, n, w : Spontaneously says at least 15-20 words

*See second page for Clarifications and Examples, and References

Source: OES/Early Intervention for Children Who Are Deaf or Hard of Hearing
Diana Lee, Roxanne Dearman, Elizabeth Hopkins, Revised Oct. 2007



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Hierarchy of Early Auditory Responses Clarifications and Examples

AWARENESS OF SOUND

0-3 months **Responses:** head turn, eye blink, eye widening, mouth widening, stops activity

3-6 months **Responses:** smiles, laughs, attempts to locate visually

12-15 months Interested in environmental sounds beyond immediate surroundings: responding to the sound of an airplane, a truck, or dog barking

SOUND SOURCE LOCALIZATION-Must have binaural hearing (amplification in both ears).

0-3 Months **Searches for sound:** turns eyes and/or head to locate sound

3-6 months **Locates the sound:** looks around until source located visually

6-9 months

Locates sound side to side at ear level: can visually find the sound source on either side.

Locates sound side to side and indirectly below: finds the sound to the side and then down

9-12 months

Locates sound side to side and directly below: finds the sound source visually, diagonally on the correct side

12-15 months

Locates sound side to side, below and indirectly above: finds the sound visually to correct side, then searches above for source

15-18 months

Locates sound directly to side, below and above and at any angle: finds the sound source visually by looking directly to the source. This skill continues to develop through 24 months.

SOCIAL RESPONSES

3-6 months **Waits for adult to take his or her turn:** looks expectantly at caregiver

Attends to social play: watches intently games like "peek-a-boo"

6-9 months **Vocalizes to music and singing:** makes sounds to the presence of music and singing

9-12 months **Plays reciprocal games:** games where caregiver and child both are involved in watching and playing such as "pat-a-cake" or "so big!"

12-15 months **Uses exclamatory expressions:** "uh-oh," "no-no," "wow"

Identifies rhymes/songs upon hearing: when child hears song only (no motions shown), he will show he knows song by doing motions particular to that song

COMPREHENSION

0-3 months **Reacts differently to angry and friendly voices:** cry, startle, frown vs. smiling, widening eyes, stopping activity; looks uncertain/bracing self vs. brightening and becoming livelier

3-6 months **Anticipates routine activities:** shows/knows what is going to happen next by kicking arms and legs, smacking lips or vocalizing more (ex: mom's fixing bottle and begins kicking and smacking lips)

6-9 months **Responds to verbal requests:** ex: "come here," "get your shoe"
Understands a few words: will look at object when mentioned ex: "bottle," "doggie"

Responds to request with natural gestures: "wave bye-bye," "want up?"

9-12 months **Performs routine activities upon verbal request:** "wash your hands," "give it to Mommy," "brush your teeth"

12-15 months **Identifies simple phrases and questions with key words:** "time for night night," "let's change your diaper," "want some more juice?"

15-18 months **Follows directions using prepositional phrases:** phrases with position words such as "in," "on," "under," "off"

IMITATION

3-6 months **Imitates own noises as he or she hears them:** cough, raspberries, vocalizations

6-9 months **Repeats sounds just made when imitated by caregiver:** turn-taking through imitation

Imitates duplicated syllables: "dada," "baba:" syllables typically include early developing front consonants such as "d, m, b"

9-12 months **Imitates new gestures with vocalizations:** blows kisses, waves bye-bye, plays pat-a-cake, peek-a-boo

Imitates names of familiar objects/actions learning to listen sounds (moo-cow; woof woof-doggie), "up," "uh-oh"

12-15 months **Imitates most new one-syllable words:** "cup," "juice," "hi," "bye," "more," "bird," "cow," "car"

Imitates familiar two-syllable words with syllable changes: "baby," "puppy," "kitty," "bubble"

15-18 months **Imitates sounds heard in environment:** "moo," "vroom," "tweet tweet," "shhh"

Begins to imitate two-word phrases: "more juice," "want up," "go bye-bye," "mommy car"

VOCALIZATIONS/VERBALIZATIONS

3-6 months **Uses extreme pitch changes:** squeals with delight

Babbles simple syllables: repeats same syllable over and over; ex: "dadadada" or "mamamama"

6-9 months **Vocalizes duplicated syllables:** vocalizes two-syllable consonant and vowel combinations such as "mama," "dada," "baba"

Vocalizes at least 4 different syllables: any consonant and vowel combinations such as "be," "ba," "boo," "ma," "do," "ga"

9-12 months **Jargons using familiar intonation patterns:** sounds like talking but without true words

15-18 months **Produces diphthongs:** two vowels vocalized together to make one sound, such as: ou (now), oi (toy), i-e (eye), a-e (day)

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