



# Learning to Grow

MAKING A DIFFERENCE TOGETHER

## Middle Ear Infection, Hearing, and Language Development

A middle ear infection is one of the most common illnesses reported in young children. It is important to be aware that a middle ear infection can impact a child's hearing, causing a temporary mild or moderate hearing loss, which may delay speech and language development.

Middle ear infections (also called Otitis Media) occur as a result of fluid in the middle ear. When there is fluid in this space, it can cause the bones in the middle ear not to vibrate properly, and it reduces sound traveling through the middle ear, affecting a child's ability to hear. Imagine hearing with a plugged ear or listening to sounds under water.

The early years are when children are learning to speak and understand words, so a mild or moderate hearing loss can impact the young child's ability to understand language and sort out speech. This may lead to subsequent speech and language difficulties. If you have a concern that your child has an ear infection and/or hearing loss, contact your child's health care provider as soon as possible. The health care provider will advise a treatment plan for your child. Remember that catching problems early can help to avoid developmental delays.

In this newsletter, we will present information on how language develops at each age level – infants, toddlers and preschoolers, and how a mild or moderate hearing loss can affect this development. In addition, we will present tips for minimizing ear infections, as well as strategies to promote language development in hearing children as well as those with a hearing loss.



### This newsletter includes:

- ♥ **Age-specific information and suggestions** about activities to do with your infant, toddler, or preschooler,
- ♥ **Featured activities** for each age group,
- ♥ **How This Helps:** a summary of your child's development by doing these activities together,
- ♥ **Resources:** for more information about this topic, and
- ♥ **Suggested Books:** a list of books to read with your child.

# Infants

From the earliest days of life, most newborns' sense of hearing is fully functioning. There are times, however, when a baby is born with a hearing loss. If your baby cannot hear, it is important to find out early so that he can get the necessary care that will help with his learning and language development. Hawai'i implements a newborn hearing screening for every baby through The Hawai'i Newborn Hearing Screening Program <https://health.hawaii.gov/genetics/programs/nhsp/>

Keep in mind that even infants are susceptible to ear infections. Here are some ways you can help minimize the risk of ear infection in an infant:

- ♥ **Breastfeed** for at least the first four to six months of life, if possible.
- ♥ **When bottle feeding**, keep baby in an upright or slightly reclined position.
- ♥ **An infant should not be put to bed with a bottle**, nor should a bottle be propped. These practices may cause the liquid from the bottle to go up a small tube leading to the middle ear, causing middle ear fluid and infection.



- ♥ **Keep children away from smoke.** Cigarette smoke increases a child's chance of middle ear infection.

Teaching sign language has been found to benefit both normal hearing babies as well as those with a hearing loss. According to the American Academy of Pediatrics, children can be taught to use their hands to "talk" long before their mouths can catch up. By teaching sign language to children from as young as six to eight months, you can help them to convey their emotions and their needs

## Activity for Infants: *Teach your Baby Sign Language*

What You Need:

None

What to Do:

1. View a resource such as [www.babysignlanguage.com](http://www.babysignlanguage.com) to familiarize yourself with simple signs to teach baby.
2. Say a word and make the gesture at the same time. For example, when you hand your baby milk, say "milk" while making the sign for it (an open and closed fist/milking gesture).
3. Pair the sign with the word every time you say it – repetition is key.
4. Start with useful and practical signs like 'milk,' 'eat,' 'more' and 'all done.'
5. Find opportunities to sign with baby throughout the day, from mealtimes to walks in the park to just playing together at home

*(See page 5 for information on how doing these kinds of activities with your child helps his development and school readiness.)*



# Toddlers

The toddler years are when children experience growth in language skills. Although every child develops at his own pace, most toddlers are alert to the people around them and pick up on the language they hear. They are also beginning to develop a sensitivity to the sounds in language and the ability to detect and discriminate between different sounds. A mild or moderate hearing loss may affect his ability to gain this critical skill which is crucial for learning to read.

Here are some things you can do to ensure that any toddler has opportunities to develop language:

- ♥ **Choose a quiet place** for activities.
- ♥ **Cut down on background noise.** Turn off music and televisions, fix noisy appliances such as air conditioners, and close windows and doors when it is noisy outside.
- ♥ **Be within three feet of the child and down at his eye level before speaking;** when talking make sure he is looking at you.
- ♥ **Use verbal cues** such as moving your hands and showing pictures in addition to using speech



## Activity for Toddlers: *Shake and Sing*

### What You Need:

Noisemakers like buttons, pennies, uncooked rice, or dried beans  
A small clean recycled plastic bottle with cover  
Tape

### What to Do:

1. Put a few noisemakers into a recycled plastic bottle. Screw the cap on tightly and secure with tape.
2. Let your child shake the plastic bottle and ask him whether he hears the sounds it makes.
3. Sing and act out this song to the tune of “Mary Had a Little Lamb”:

*Shaker, shaker, up, up, up (shake the bottle above the head.)*  
*Down, down, down. (Shake the bottle at knee-level.)*  
*Up, up, up. (Shake it above the head.)*  
*Shaker, shaker all around. (Shake it back and forth.)*  
*All around the town. (Turn around in a circle.)*

**SAFETY ALERT!** Closely monitor child when handling small parts

*(See page 5 for information on how doing these kinds of activities with your child helps his development and school readiness.)*





# Preschoolers

Language skills developed in the preschool years serve as an important foundation for reading and writing. A hearing loss can delay the process of developing these critical skills. One strategy to help a child with a hearing loss is to immerse him in language-facilitating activities, such as reading books daily to the child.

Reading Rocket offers the following tips when reading to a child with a hearing loss:

- ♥ **Read the same story again and again.** This will help your child catch words he may have missed before.
- ♥ **Make sure your child can see your face and the pictures.** This will help him follow the story, even if he doesn't catch all the words.
- ♥ Have your child turn pages, touch the pictures, and lift the flaps. This will give him



practice using his hands, which gets him ready to sign.

- ♥ Use simple sign language as you read.
- ♥ Read slowly to the child, pausing at times to ask questions (e.g., “What do you think will happen next?”)

## Activity for Preschoolers: A Listening Walk

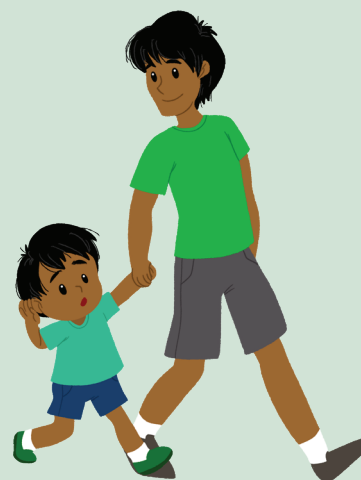
**Adapted from [clarkeschools.org/listeningwalk](http://clarkeschools.org/listeningwalk)**

What You Need:

*The Listening Walk* by Paul Showers (optional)

What to Do:

1. Let your child know that you will be going on a “listening walk” together.
2. Read the book, *The Listening Walk*, if you have it or are able to borrow it from the library.
3. As you walk with your child, tell him that you will not be talking, but just listening to the sounds around you as you walk.
4. As you take your quiet, unhurried walk together, identify the sounds around you (e.g., the sound your shoes make as you walk, or an airplane flying overhead), and ask your child to share with you what sounds he hears.
5. Enjoy the wonder of slowing down to listen to the sounds all around you



*(See page 5 for information on how doing these kinds of activities with your child helps his development and school readiness.)*

# How This Helps

The activities suggested in this newsletter help promote many different aspects of development:

## Physical Development

- ♥ Use and strengthen small muscles, e.g., facial muscles, fingers, hands, and toes Use and strengthen large muscles
- ♥ Learn to use his body with intention

## Social and Emotional Development

- ♥ Learn to interact with others
- ♥ Feel important and good about himself

## Language and Literacy Development

- ♥ Develop early reading skills and a love of reading
- ♥ Increase his observation, listening and understanding skills, and his attention span

## Cognitive Development

- ♥ Develop his thinking and problem-solving skills
- ♥ Develop his understanding of positional words and spatial awareness



# Kids in the Kitchen

Cooking teaches valuable lessons such as math (quantities, measurement), science (how matter changes), fine motor (stirring, pouring), and literacy (print awareness). As you make this recipe with your child, talk about kitchen safety. Show her how to handle items safely and allow her to do as much as she is capable of. Praise her efforts, and ask questions throughout the process to encourage her thinking skills. Most of all, have fun!

## Ruthie's Crunchy Chicken

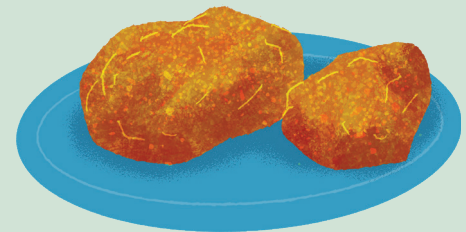
*Adapted From Kids Cooking, Klutz Press*

### Ingredients:

- |                                   |                         |
|-----------------------------------|-------------------------|
| 3 cups cornflakes cereal          | seasoned salt, sprinkle |
| 10 chicken legs (drumsticks)      | paprika, sprinkle       |
| $\frac{3}{4}$ stick melted butter |                         |

### Directions:

1. Preheat the oven to 350 degrees.
2. Have your child scoop the cornflakes into a gallon size re-sealable plastic bag and crush them with a rolling pin. Be sure to point out the different sounds you hear while making this dish together. For example, the sound of the cornflakes being crushed.
3. Have your child dump the crushed cornflakes into a pie tin or other shallow dish.
4. As you work with the chicken, describe what you're doing to your child. Pat each drumstick dry with a paper towel, dip it in the butter, then roll it in the crushed cornflakes until covered. Wash your hands well after touching the raw chicken.
5. Place the cornflake-coated drumsticks into a baking pan (they shouldn't be touching one another), and sprinkle with seasoned salt and paprika.
6. Bake at 350 degree for about 1 hour (The chicken is done when you can pull the meat off with a fork).



# Resources

## Ear Infections and Language Development

[https://fpg.unc.edu/sites/fpg.unc.edu/files/resources/other-resources/NCEDL\\_Ear-Infections-Language-Development.pdf](https://fpg.unc.edu/sites/fpg.unc.edu/files/resources/other-resources/NCEDL_Ear-Infections-Language-Development.pdf)

This comprehensive booklet discusses what it means when a child has an ear infection, how to identify symptoms, how ear infections can affect hearing, and helpful tips and suggestions for language development.

## *My First Signs* by Annie Kubler

This first signing guide for hearing and deaf children contains over forty key signs with simple

and clear instruction and illustrations. A helpful tip is given at the bottom of each page to help beginners get started.



## Suggested Books

Discover these books and more at the **Hawai'i State Public Library** [www.librarieshawaii.org](http://www.librarieshawaii.org).

### Infants and Toddlers

***Baby Signs for Mealtime*** by Linda Acredolo, Ph.D., & Susan Goodwyn, Ph. D.

This book for babies includes the most popular signs for mealtime, and provides parents a place to begin 'talking' with their little one from the start. Through baby signing, babies can communicate when they want more, when something is too hot, or even to let everyone know it's 'all gone!'

***Polar Bear, Polar Bear What Do You Hear?*** By Bill Martin Jr.

This classic book, by the same author and illustrator as *Brown Bear, Brown Bear What Do You See?* is designed to help young children identify wild animals and the noises they make. Children will chant the rhythmic words, make animal sounds, and pretend to be the zoo animals featured in the book.

### Preschoolers

***Roadwork*** by Sally Sutton and Brian Lovelock

Construction noise might make you reach for the earplugs, but for a lot of kids, the sounds of backhoes beeping and cement trucks rumbling is music to their ears. This kid-pleaser is filled with sound, including the "Ping! Bang! Tap" of the hammer and the "Screech! Boom! Whoosh!" of the bulldozer.

***Tubes in My Ears*** by Virginia Dooley

A hospital can be a scary place for a child. Here's a sympathetic and honest look at what to expect when having a minor operation, from what doctors wear and the names of instruments to what it feels like to have anesthesia. Cheerful, detailed illustrations add a touch to this essential book for young patients.



**Learning to Grow** is a project of the University of Hawai'i, Windward Community College, with funding from the Hawai'i Department of Human Services. Visit our website at [www.learningtogrowhawaii.org](http://www.learningtogrowhawaii.org) or visit us on Facebook at [www.facebook.com/learningtogrowhawaii](http://www.facebook.com/learningtogrowhawaii)