

SPEECH AND LANGUAGE RESOURCE GUIDE

# For Parents of Infants and Toddlers with Down Syndrome

BIRTH TO FIRST WORD

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## How does my infant and toddler learn to speak?

Infants with Down syndrome communicate their needs to their families primarily by crying, laughing and gestures. They learn communicative intent, i.e. that when they make a sound or point, someone will come and help meet their needs. Speech is an overlaid function, i.e. it uses the structures and movements used for breathing and feeding, but there isn't a separate speech system in the body. Through feeding, crying, cooing and babbling, infants learn to coordinate the movements that they will use for speaking. They learn to lengthen the exhalation phase of breathing, which provides the power for speaking. They play with their lips and tongues and jaw and make sounds, improving their muscle strength, range of motion, and feedback system. They test their voice, and make loud and soft sounds. They babble strings of sounds. Speech is an output system but it is based on the input that the child receives. It is important to ensure that the child's input systems that affect language learning, hearing, vision and touch, are functioning well.

## What type of speech and language evaluation and treatment are needed?

During the first year of life, speech and language evaluation and treatment focus on the pre-speech and pre-language skills. Evaluation can determine which skills your child has mastered and which would be best to work on next. Therapy can teach you how to work with your child at home and model how to use play activities (rolling a ball back and forth) and activities of daily living (feeding, bathing) to promote speech and language.

## What are the pre-speech skills?

- A. Respiration
- B. Feeding skills
- C. Tactile skills
- D. Imitation skills
- E. Oral motor skills
- F. Motor planning skills
- G. Sound production skills

## What are the pre-language skills?

- A. Communicative intent
- B. Turn taking
- C. Engaging attention
- D. Requesting
- E. Protesting
- F. Social communication
- G. Cognitive/linguistic skills (cause & effect, object permanence, means-end)
- H. Referential knowledge (a word or symbol can represent an object)

By about 8-10 months, your child with Down syndrome has mastered these pre-language skills and is ready to use language. The problem is that your child is not developmentally ready to use speech. So, there will be a period of at least a year when your child needs a transitional language system with which to communicate until he is ready to use speech. The most frequently used transitional language systems are sign language (total communication in which sign and speech are used to teach language), the Picture Exchange Communication System (PECS), communication boards, and electronic communication devices.

## What can I do to improve my infant & toddler's ability to communicate?

The speech-language pathologist (SLP) is the professional who will work with you and your child on communication skills. In the first year, she will help you learn more about the pre-speech and pre-language skills and how to work with your child. She will work on the muscles for speaking through feeding therapy and through imitation and vocal play. There is a wide range of ages when children with Down syndrome begin to speak, somewhere between ages two and five years.

## Where can I go for help?

Books, conferences and presentations will help you learn more about how to help your infant and toddler with speech and language. Speech and language services may be available through your local school system, medical centers, community clinics (such as The ARC and Easter Seals), university clinics, and private practitioners. Call Child Find or First Call in your local area to find out about speech and language services available to you. Your local parent support group is an excellent source of information to help in locating professionals in your area. For more information:

Kumin, L. (2003). *Early Communication Skills in Children with Down Syndrome: A Guide for Parents and Professionals*. Bethesda, MD: Woodbine House.

Kumin, L. (2002). Starting out: Speech and language intervention for infants and toddlers with Down syndrome, in Cohen, W., Nadel, L. & Madnick, M. (Eds). *Down syndrome: Visions for the 21st century* (391-402). NY: Wiley-Liss.

Kumin, L. (1999). Comprehensive speech and language treatment for infants, toddlers, and children with Down syndrome. In Hassold, T. J. & Patterson, D. *Down syndrome: A promising future, together*. New York, NY: Wiley-Liss, pp. 145-153.

### Videos:

**Signing Time** (Coleman, L., Coleman, R. & Brown, A.): Video available in VHS and DVD form

**Development in Practice: Activities for Babies with Down Syndrome** (available through [www.downsed.org](http://www.downsed.org))

**DS: The First Eighteen Months** (Schermerhorn, W. available though [www.woodbine-house.com](http://www.woodbine-house.com))

[www.ndsccenter.org](http://www.ndsccenter.org)

[www.ndss.org](http://www.ndss.org)

[www.ds-health.com](http://www.ds-health.com)

[www.downsed.org](http://www.downsed.org)

[www.nads.org](http://www.nads.org)