

Early Intervention Resources

What is early intervention?

Early intervention is the term used to describe the services and supports available to children with developmental delays and disabilities and their families from birth through age two. Authorized by the **Individuals with Disabilities Education Act (IDEA)**, early intervention is available in every state. **Part C of IDEA** is a federal grant program that addresses and assists states in providing supports to eligible children and their families.

Supports may include:

- Assistive technology (devices a child might need)
- Audiology or hearing services
- Speech and language services
- Counseling and training for a family
- Medical services
- Nursing services
- Nutrition services
- Occupational therapy
- Physical therapy
- Psychological services

Early interventions can significantly impact a child's ability to learn new skills, overcome challenges, and increase school and life success.

How can I find out if my child is eligible for early intervention services?

Eligibility for early intervention services is determined by an intake evaluation of your child's skills and abilities; however, children born with specific conditions such as Down syndrome are often referred to their local office before leaving the hospital. Your pediatrician can also give you a referral, or you can find the contact information for your area through the [Early Childhood Technical Assistance Center website](#).

Once connected with an early intervention services coordinator, they will walk you through the steps to determine the needed services. A team of people will then work together to design an **Individualized Family Service Plan** or an **IFSP**, which will outline the services your family will receive.

Who pays for early intervention services?

Each state determines fees for services. Some early intervention services are provided free of charge. Some services may be covered under healthcare insurance or Medicaid, but insurance may only be billed with your written consent. If you do not give such consent, the system may not limit or deny you or your child services. You may be charged for services not covered by insurance. In such cases, you may be charged on a "sliding scale" based on your earnings. If you cannot afford services, your child still cannot be denied services. Every effort should be made to provide services to all children who need help, regardless of family income. Your services coordinator will provide a written explanation of all services and fees.

For more accurate and up-to-date information and resources, visit our website.

www.ndsccenter.org



What happens when my child turns 3?

On your child's third birthday, they are eligible to attend preschool through **Part B of IDEA**. The Preschool Grants Program, Section 619 of Part B of IDEA, is a federal grant program intended to help states ensure that all preschool-aged children (age 3-5) with disabilities receive free appropriate special education and related services in their least restrictive environment. Before that time, your service coordinator will help with the transition, and a new team will develop an **Individualized Educational Plan (IEP)** for your child. The team may include parents or caregivers, teachers, a school psychologist, and other child development specialists or education specialists. The IEP contains specific learning goals for that child, based on his or her needs and capabilities. The team also decides how best to carry out the IEP and placement.

Speech and Language

Among the most common challenges confronting people with Down syndrome are speech and language development. Delays may be due to common hearing problems, cognitive development, or decreased muscle tone affecting mouth and throat strength and coordination. Early intervention and ongoing therapies are critical to removing communication barriers and developing the skills required to speak.

Why is early intervention essential to speech and language development?

Early intervention in speech and language is vital to a child's developing brain and can significantly impact your child's development. It can improve their ability to communicate and interact with others by improving their social skills and emotional development. (Speech Works, 2019)

Addressing communication and language difficulties through early intervention may also prevent potential behavioral, reading, and social interaction problems. Early intervention does not just involve "treatment" for the child, but also it provides education, support, and guidance for parents.

When should I start early intervention when it comes to speech and language?

Once babies begin to smile, parents begin to have interactions with them that are like conversations. When parents smile, coo, and talk to the baby, they tend to do so in a conversational style, waiting for the baby to smile, gurgle or babble after each action. These exchanges are usually a source of pleasure to both partners and strengthen the emotional bonds. When adults spend time in these baby conversations, it is the child's first experience of pleasurable "talk" with an adult. They begin to understand that being able to communicate is fun and worth becoming skilled at this activity. They also learn to look, listen, and take turns in the conversation, all essential skills for effective communication when talking. (Sue Bucky, 1993)

Why do individuals with Down syndrome struggle with speech?

Speech production of individuals with Down syndrome may be related to oral structure and function (Miller & Leddy, 1998; Stoel-Gammon, 1997). Structural differences include a small oral cavity with a relatively large tongue and a narrow, high arched palate. Missing, poorly differentiated, or additional muscles characterize facial structures, and differences in nerve innervation have also been found (Miller & Leddy, 1998). These differences are thought to account, in part, for poor speech intelligibility through dysarthric factors such as reduced speed, range of motion, and coordination of the articulators. In addition, compared with typically developing children, boys with Down syndrome show differences in the structure of the lips, tongue, and velopharynx and are less skilled at speech motor functions and coordinated speech movements involving the lips, tongue, velopharynx, and larynx (Barnes, Roberts,



Mirrett, Sideris, & Misenheimer, 2006). Symptoms of childhood apraxia of speech also have been reported (Rupela & Manjula, 2007; Kumin, 2006; Kumin & Adams, 2000).

What resources do you recommend that address speech and language in children with Down syndrome?

Boston Children's Hospital produced a guide titled [Early Communication Development & Down Syndrome](#). It includes information from NDSC board member and Director of Boston Children's Down Syndrome Program; Assistant, Department of Neurology and Developmental Medicine Center Instructor of Neurology, Harvard Medical School, Dr. Nicole Baumer. In the guide, Dr. Baumer explains that "Early developmental and educational interventions along with an enriching and caring home environment foster and promote positive development for children with Down syndrome. Speech and language development can be a particular challenge for many people with Down syndrome."



Dr. Libby Kumin, retired Professor in the Department of Speech-Language Pathology/Audiology at Loyola University in Maryland, and founder of the Down Syndrome Speech and Language Center for Excellence generously provided the following Speech and Language Resource Guides for individuals with Down syndrome.

[Adults](#)

[Preschool Through Kindergarten](#)

[Adolescents](#)

[First Words and Phrases](#)

[Basis for Speech, Language and Communication](#)

[Childhood Apraxia](#)

[Infants and Toddlers](#)

[School-Age children](#)

[Oral Motor Skill Difficulties](#)

Dr. Kumin also wrote a 3-part article, which was published in our NDSC *Down Syndrome News*. Each article can be accessed on the NDSC website at ndscenter.org or by clicking below.

[Part 1](#)

[Part 2](#)

[Part 3](#)

Physical Therapy

The physical therapist is an essential partner in health care and fitness for anyone diagnosed with Down syndrome. Physical therapists help people with Down syndrome gain strength and movement skills to function at their best throughout all ages and life stages.

Children with Down syndrome have tremendous potential in the area of gross motor skills development. Gross motor skills will be one of your loved one's strengths and an arena that also builds confidence, pride, and self-esteem. They will be excited to run, jump, ride a tricycle or bicycle, and be active with their friends and siblings. (Winders, 2014)

Why is Physical Therapy important for individuals with Down syndrome?

Physical Therapy is important for your loved one with down syndrome. Children with Down syndrome have several physical characteristics that affect how they spontaneously move and learn gross motor skills. Each child needs to figure out how to move their body to achieve each gross motor skills while



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overcoming the effects that each factor exerts on them. (Winders, 2014) Physical therapy will improve strength, developmental skills, balance, coordination, postural control, and overall physical fitness.

You can find an agency to help with physical therapy for your state at the [ECTA Center](#) or contact your pediatrician or family physician.

Why do people with Down syndrome need physical therapy early intervention?

The physical therapist is an important partner in health care and fitness for anyone diagnosed with Down syndrome. A physical therapist will help with the effects of hypotonia-low muscular tone, ligamentous laxity- increased flexibility in joints, decreased muscle strengths. They will also address other physical characteristics of people with Down syndrome, such as shorter arms and legs relative to their torsos and medical conditions that can affect the ability to learn gross motor skills.

Specifically, physical therapists work with children with Down syndrome to improve muscle strength, balance, coordination, and movement skills to improve independence with daily activities and quality of life. Early intervention by a physical therapist helps a child with DS develop to their maximum potential.

Where would my child receive physical therapy?

There are many different facilities where individuals with Down syndrome could go for physical therapy. They include:

- Neonatal Intensive Care Unit
- Early Intervention
- School-based
- Inpatient hospital or rehab hospital (acute care)
- Outpatient
- Wellness groups
- Specialty Clinics

Other Early Intervention Resources

[Center for Early Literacy](#)

[Advance Behavior](#)

[Early Communication Skills for Children with Down Syndrome](#)

[Early Intervention Speech & Language Treatment Program Planning Form](#)

[Gross Motor Skills for Children with Down Syndrome](#)



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