

Infant Development and Tracking Developmental Milestones

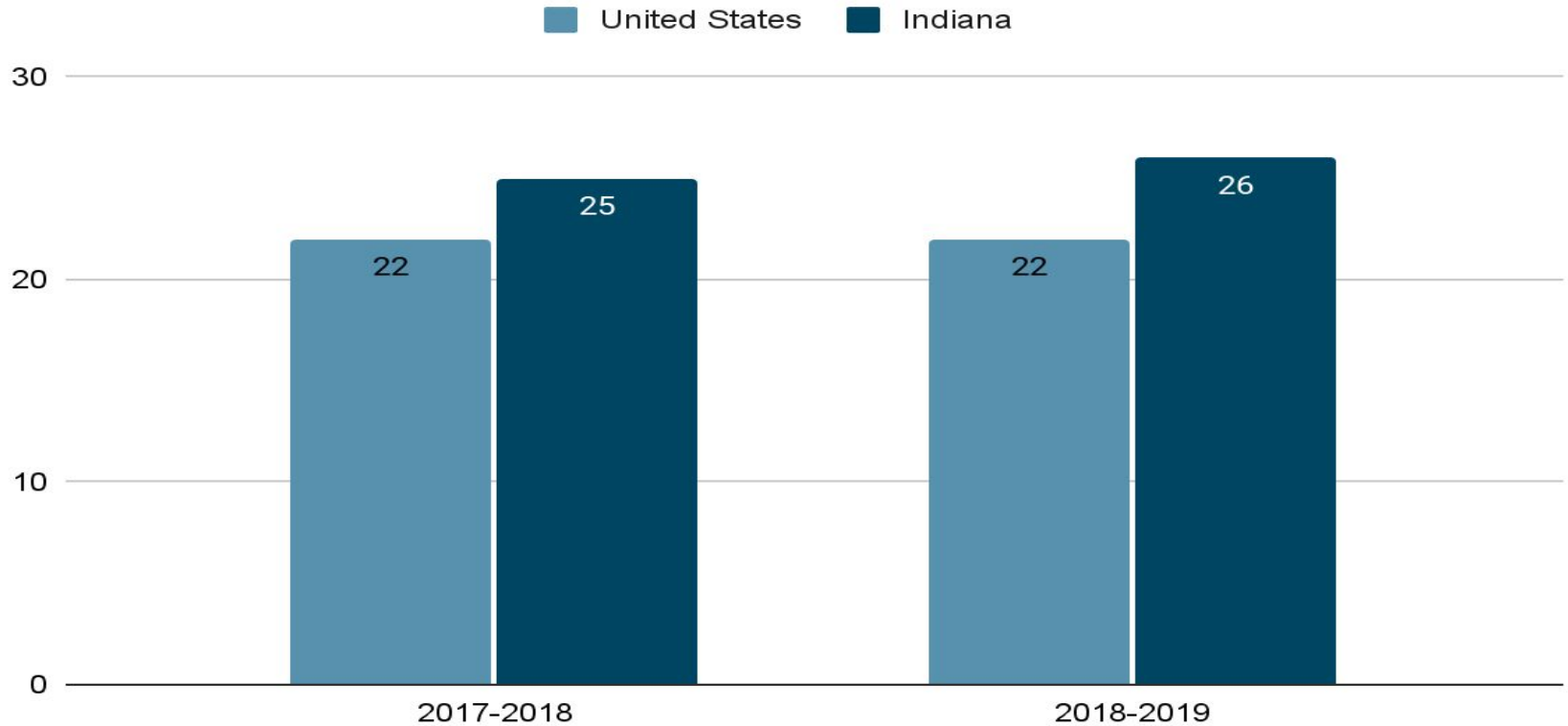
Maria Del Rio, MD
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Developmental and Behavioral Screening

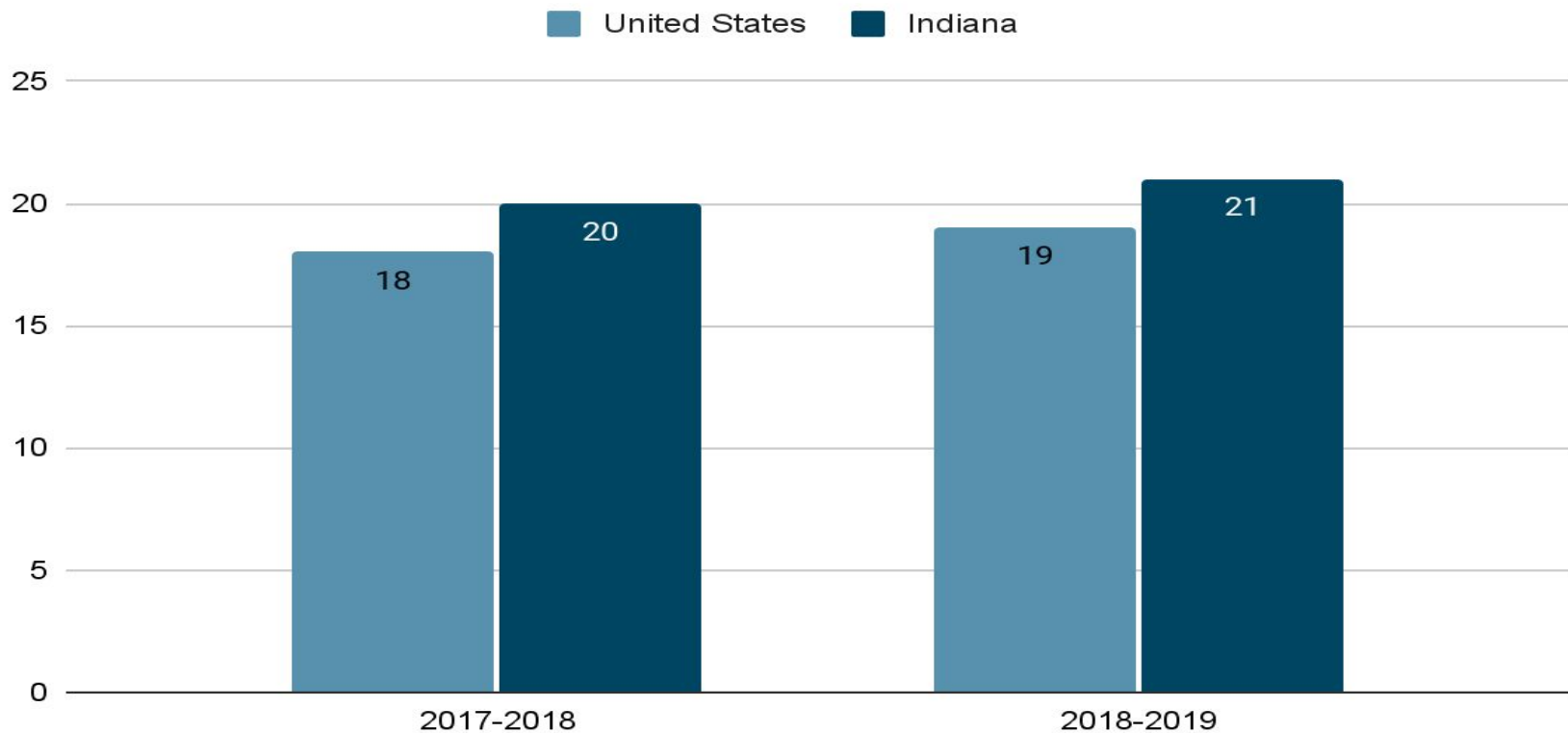
- An estimated 16.7% of children in the USA have a developmental disability or developmental delay. (CDC report, NCBDDD.2018)
- An estimated 20-25% of youth in the US will meet criteria for a mental health disorder with severe impairment over their lifetime. J Am Acad Child Adolesc Psychiatry.2010
- Young children from low income families are at greater risk to have a developmental delay.
- Delays in development are linked to behavior problems and poor academic achievement later in life.
- Monitoring, screening and surveillance can help identify these problems early and allow the child to receive appropriate services in a timely manner.

Percent of children who have one or more emotional, behavioral, or developmental conditions in Indiana (Kids Count Data Center)



Percent of children with special health care needs in Indiana

(Kids Count Data Center)



Benefits Of Developmental Screening and Surveillance

Screening and surveillance for developmental/behavioral problems in children increases early identification, allowing for early intervention and improved outcomes.

The response to interventions is greater in early childhood.

Children with undetected developmental delays are at increased risk for social and emotional problems, early school problems and school failure.

Several studies have demonstrated better short and long term outcomes when developmental problems are identified early and services are provided for children at increased risk.

Early intervention has been associated with decreased need for special education services during the school years, higher graduation rates, reduced teen pregnancy rates, and a decrease in criminal behavior and violence.

Factors that influence child development and behavior

Child maltreatment, abuse and neglect

Adverse childhood experiences (ACEs)

- poverty
- unstable housing
- parental stress
- exposure to alcohol, substance abuse
- violence/trauma
- poor nutrition

Parental mental health problems, unemployment

Medical conditions: lead poisoning, genetic conditions, prematurity

Developmental Outcomes of Opioid Exposed Children

- Lower cognitive scores
- Behavioral, attention and sensory deficits
- Deficits in gross motor and fine motor function
- Developmental delays, speech and/or language impairments
- Increased incidence in disorders of conduct
- Poor performance on academic testing
- Increased incidence of anxiety, emotional disturbances

Intervention Strategies for Families with Opioid Exposed Children

- Family centered approach
- Support for positive parenting behaviors
- Case management to help coordinate services
- Integrated pediatric and maternal health care
- Early intervention and screening
- Peer to peer support
- **Communication among integrated systems**

Fetal Alcohol Spectrum Disorder

FASD is a term that encompasses the range of physical, mental health, behavioral and cognitive effects that occur in children with prenatal alcohol exposure.

Early identification is associated with improved outcomes and could prevent FASDs in subsequent pregnancies.

Asymptomatic children at risk for FASD should be monitored for symptoms that may emerge during development (delayed milestones, school problems, impairment in adaptive and self help skills).

Definitions

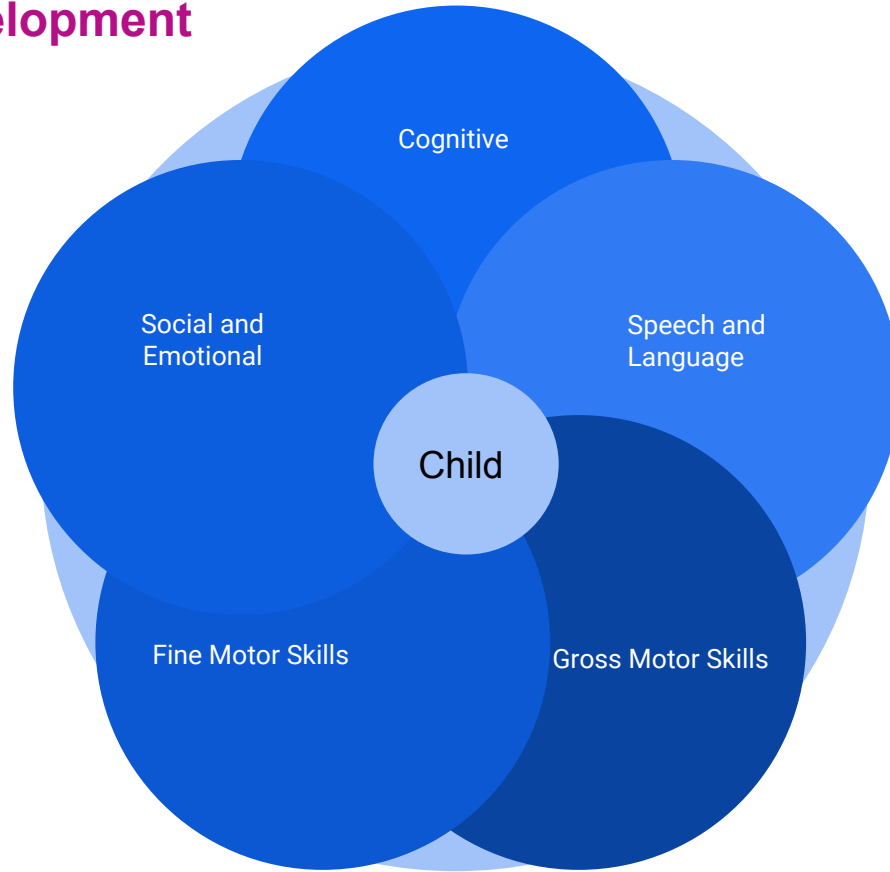
Developmental Disorders: A group of conditions caused by impairments in learning, language, behavior or motor skills.

Developmental Surveillance: Process by which children who are at risk for or have developmental delay are identified. Performed at any well child visit or any time a concern is raised (healthcare provider).

Developmental Screening: The use of a standardized test to identify children at risk for a developmental disorder (healthcare provider).

Developmental Evaluation: A more in-depth look at a child's development, done by a trained specialist (developmental pediatrician, child psychologist).

Areas of Child Development



Developmental Surveillance (clinical impression)

Strategy:

Identify parental concerns

Maintain developmental history

Observe parent child interactions

Identify risk factors

Maintain accurate records

Collaborate with other providers and professionals

Developmental Screening (validated screening tests)

Timing:

Any time a parent or clinician has concerns or when a risk factor is identified

During well child visits

Nine month visit: motor, vision, hearing and communication problems

Eighteen month visit: fine and gross motor delays, language delays, symptoms of ASD

Thirty month visit: motor, language and cognitive delays

Four year old visit: school readiness

Five and over visit: mental health disorders and impaired psychosocial functioning

Screening Tests

General for children without identified conditions or specific for targeted conditions:

Developmental Screening Tests

- Cognitive, language, motor, social
- Specific concerns- language delay, ASD

Behavioral Screening Tests

- Behavioral conditions (ADHD)
- Social emotional development
- Self help skills

Developmental Monitoring

Parents and caregivers track the child's development over time and identify if the child is meeting the milestones for his/her age.

Timing:

- From birth to five years

Strategy:

- Helps parents understand their child's developmental milestones and identify concerns in the child's development that can be shared with the medical care provider.
- Early identification of developmental delays can lead to early intervention and improved outcomes



**Learn the Signs.
Act Early.**

www.cdc.gov/Milestones

1-800-CDC-INFO (1-800-232-4636)

Your baby at 9 months*

Baby's Name _____

Baby's Age _____

Today's Date _____

Milestones matter! How your baby plays, learns, speaks, acts, and moves offers important clues about his or her development. Check the milestones your baby has reached by 9 months. Take this with you and talk with your baby's doctor at every well-child visit about the milestones your baby has reached and what to expect next.



What most babies do by this age:

Social/Emotional Milestones

- Is shy, clingy, or fearful around strangers
- Shows several facial expressions, like happy, sad, angry, and surprised
- Looks when you call her name
- Reacts when you leave (looks, reaches for you, or cries)
- Smiles or laughs when you play peek-a-boo

Language/Communication Milestones

- Makes different sounds like "mamamama" and "babababa"
- Lifts arms up to be picked up

Cognitive Milestones (learning, thinking, problem-solving)

- Looks for objects when dropped out of sight (like his spoon or toy)
- Bangs two things together

Movement/Physical Development Milestones

- Gets to a sitting position by herself
- Moves things from one hand to her other hand
- Uses fingers to "rake" food towards himself
- Sits without support

* It's time for developmental screening!

At 9 months, your baby is due for general developmental screening, as recommended for all children by the American Academy of Pediatrics. Ask the doctor about your baby's developmental screening.

Help your baby learn and grow

As your baby's first teacher, you can help his or her learning and brain development. Try these simple tips and activities in a safe way. Talk with your baby's doctor and teachers if you have questions or for more ideas on how to help your baby's development.



- Repeat your baby's sounds and say simple words using those sounds. For example, if your baby says "bababa," repeat "bababa," then say "book."
- Place toys on the ground or on a play mat a little out of reach and encourage your baby to crawl, scoot, or roll to get them. Celebrate when she reaches them.
- Teach your baby to wave "bye-bye" or shake his head "no." For example, wave and say "bye-bye" when you are leaving. You can also teach simple baby sign language to help your baby tell you what he wants before he can use words.
- Play games, such as peek-a-boo. You can cover your head with a cloth and see if your baby pulls it off.
- Play with your baby by dumping blocks from a container and putting them back in together.
- Play games with your baby, such as my turn, your turn. Try this by passing a toy back and forth.
- "Read" to your baby. Reading can be talking about pictures. For example, while looking at books or magazines, name the pictures as you point to them.
- Limit screen time (TV, tablets, phones, etc.) to video calling with loved ones. Screen time is not recommended for children younger than 2 years of age. Babies learn by talking, playing, and interacting with others.
- Find out about choking risks and safe foods to feed your baby. Let him practice feeding himself with his fingers and using a cup with a small amount of water. Sit next to your baby and enjoy mealtime together. Expect spills. Learning is messy and fun!
- Ask for behaviors that you want. For example, instead of saying "don't stand," say "time to sit."
- Help your baby get used to foods with different tastes and textures. Foods can be smooth, mashed, or finely chopped. Your baby might not like every food on the first try. Give her a chance to try foods again and again.
- Say a quick and cheerful goodbye instead of sneaking away so your baby knows you are leaving, even if he cries. He will learn to calm himself and what to expect. Let him know when you return by saying "Daddy's back!"

To see more tips and activities download CDC's [Milestone Tracker app](#).

Your child at 18 months*

Child's Name _____

Child's Age _____

Today's Date _____

Milestones matter! How your child plays, learns, speaks, acts, and moves offers important clues about his or her development. Check the milestones your child has reached by 18 months. Take this with you and talk with your child's doctor at every well-child visit about the milestones your child has reached and what to expect next.



What most children do by this age:

Social/Emotional Milestones

- Moves away from you, but looks to make sure you are close by
- Points to show you something interesting
- Puts hands out for you to wash them
- Looks at a few pages in a book with you
- Helps you dress him by pushing arm through sleeve or lifting up foot

Language/Communication Milestones

- Tries to say three or more words besides "mama" or "dada"
- Follows one-step directions without any gestures, like giving you the toy when you say, "Give it to me."

Cognitive Milestones (learning, thinking, problem-solving)

- Copies you doing chores, like sweeping with a broom
- Plays with toys in a simple way, like pushing a toy car

Movement/Physical Development Milestones

- Walks without holding on to anyone or anything
- Scribbles
- Drinks from a cup without a lid and may spill sometimes
- Feeds herself with her fingers
- Tries to use a spoon
- Climbs on and off a couch or chair without help

* It's time for developmental screening!

At 18 months, your child is due for general developmental screening and an autism screening, as recommended for all children by the American Academy of Pediatrics. Ask the doctor about your child's developmental screening.

Your child at 30 months*

Child's Name _____

Child's Age _____

Today's Date _____

Milestones matter! How your child plays, learns, speaks, acts, and moves offers important clues about his or her development. Check the milestones your child has reached by 30 months. Take this with you and talk with your child's doctor at every well-child visit about the milestones your child has reached and what to expect next.



What most children do by this age:

Social/Emotional Milestones

- Plays next to other children and sometimes plays with them
- Shows you what she can do by saying, "Look at me!"
- Follows simple routines when told, like helping to pick up toys when you say, "It's clean-up time."

Language/Communication Milestones

- Says about 50 words
- Says two or more words, with one action word, like "Doggie run"
- Names things in a book when you point and ask, "What is this?"
- Says words like "I," "me," or "we"

Cognitive Milestones (learning, thinking, problem-solving)

- Uses things to pretend, like feeding a block to a doll as if it were food

- Shows simple problem-solving skills, like standing on a small stool to reach something
- Follows two-step instructions like "Put the toy down and close the door."
- Shows he knows at least one color, like pointing to a red crayon when you ask, "Which one is red?"

Movement/Physical Development Milestones

- Uses hands to twist things, like turning doorknobs or unscrewing lids
- Takes some clothes off by himself, like loose pants or an open jacket
- Jumps off the ground with both feet
- Turns book pages, one at a time, when you read to her

* It's time for developmental screening!

At 30 months, your child is due for general developmental screening as recommended for all children by the American Academy of Pediatrics. Ask the doctor about your child's developmental screening.



Milestones Matter

Track your child's developmental milestones and try brain building tips to add learning to everyday moments!

Track Your Child's Development

Track how your child plays, learns, speaks, acts, and moves with CDC's *Milestone Tracker* app—and share all progress and any concerns with their doctor during well-child visits. www.cdc.gov/MilestoneTracker



BY 2 MONTHS:
Smiles at you



BY 6 MONTHS:
Laughs with you



BY 12 MONTHS:
Plays games with you, like "peek-a-boo"



BY 18 MONTHS:
Points to show you something interesting

Brain Building Tip:

Suggested Age: 0–2 years

Powered by **vroom.**

We're surrounded by words that are ready for reading. Try reading signs aloud to your child and talk to them about what they mean.

It doesn't matter if it's a book, magazine, or billboard – it all counts! Reading to your child, anywhere and everywhere, helps them develop a rich, diverse vocabulary. Find more tips at vroom.org.

Learn the Signs.
Act Early.



Centers for Disease
Control and Prevention
www.cdc.gov/ActEarly
1-800-CDC-INFO

Do you have concerns about how your child plays, learns, speaks, acts or moves?
Visit www.cdc.gov/concerned and talk with your child's doctor.

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