# Early Screening of Children for Developmental Delays Resource Guide



Maryland Center for Developmental Disabilities at Kennedy Krieger Institute

Building Partnerships. Changing Lives.

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#### What is Developmental Screening?

The use of a standardized tool to assess specific child skills and behavior, to identify if the child is at risk for developmental delay and in need of additional assessment.

#### What is Developmental Surveillance?

Ongoing tasks that build on the provider's knowledge of child development and parent's shared concerns to identify children at risk for developmental delays and other concerns.

#### What are Developmental Milestones?

A set of goals that help determine if a child is undergoing typical development or is delayed in certain areas. Children reach milestones in how they play, learn, speak, behave, and move (CDC, 2020).

#### What is a Developmental Delay?

A diagnostic term used to refer to young children who are not achieving skills (i.e. not reaching developmental milestones) at the expected time. Delays can occur in these domains: social-emotional development, communication and language, fine and gross motor skills, and cognitive development (Vitrikas et al., 2017).



## What We Know About Early Screening

## **Myths**

## **Facts**



- All children are screened during routine health supervision visits with their pediatrician.
- Being screened once in a lifetime is enough to identify if a child has a developmental delay.
- Early intervention is not related to a child's improvement of skills.
- Parents are not trained to identify signs of delays in their children, so their comments are not credible.
- Children with signs of delays are always identified and referred for evaluation.

- Only 2 of 10 young children receive the American Academy of Pediatrics (AAP) recommended developmental screening during their routine well-visits to their pediatrician (CDC, 2014).
- Regular screening helps raise awareness of a child's development, making it easier to expect and celebrate developmental milestones (Schumacher, 2016).
- Children with autism receiving early intervention show significant improvements in cognitive and language skills (Wallace, 2018).
- Several screening instruments, particularly those relying on parent report, accurately detect speech and language problems in preschool children (Wallace, 2018).
- Young children at risk for developmental delay may remain unidentified, or when identified, may not be referred for evaluation (Talmi, 2014).



## Early Screening FAQ

#### Why does early screening matter?

- Early identification of developmental delays is essential to providing prompt, appropriate and age-sensitive opportunities for children ages birth to 5 (Leon, Holliker, & Pepe, 2015).
- Early screening prevents identified developmental delays from becoming more significant and leading to more disabling conditions.
- When children are screened early and routinely, opportunities for early identification, referral and intervention are vastly improved.

#### When should a child be screened?

- Children should be screened during regular well-child visits even if a parent or provider has no concerns.
- The American Academy of Pediatrics recommends screening of all children for behavioral and developmental delays at 9, 18, and 30 months of age.
- Children should also be screened when a parent, a provider, an educator, or a community member has a concerrn.

#### When should I be concerned?

- Because milestones matter, knowledge of child development and what children can do and understand at different ages can help with early interverntion and prevention.
- Download CDC's free Milestone Tracker mobile app from the App Store or Google Play or print a paper checklist from www.cdc.gov/Milestones to help track and monitor a child's milestones. See developmental milestones examples below.



## Early Screening FAQ Continued

#### Where do I go if I have a concern?

- Schedule an appointment with your child's early childhood provider or call your state's early intervention program. Find the number at www.cdc.gov/FindEl
- Complete and share your child's milestone checklist with the provider. Visit www.cdc.gov/Milestones
- Request a developmental screening for your child and seek a second opinion if you are uneasy with the advice you receive.
- For more information, visit www.cdc.gov/DevScreening

#### Who is considered an early childhood provider?

- Pediatric health care providers
- Child psychologists and social workers
- Preschool teachers and other early childhood educators
- Public health nurses and other medical providers
- Speech, occupational, and physical therapists
- Audiologists and other clinical and medical providers
- Early Head Start, Head Start, preschools and parent education programs providers.
- Anyone who works with parents and their children as part of an interdisciplinary team.

### **Developmental Domains and Milestones**

\*Below gross and fine motor tasks examples are for 0 – 18 months olds

#### **Gross Motor**

#### Fine Motor

Movements using larger body muscles

Turns head, rolls to side, and sits with trunk support

Pulls to stand, bear walks, throws ball while standing

Movements using smaller body muscles for daily living skills

Hands fisted near face; retains rattle if placed in hand

Transfers objects: hand-mounth-hand; scribbles spontaneously

\*Below language & cognitive tasks examples are for 18 – 36 months olds

#### Language

#### Cognitive

Receptive and expressive communication skills

Points to 3 body parts & to family people when named; understands "mine"

Counts to 3 and gives first and last name

Memory, reasoning, and problemsolving skills

Matches pairs of objects; deduces location of hidden object

Points to body parts based on function (what do you hear with?)

\*Below social-emotional & behavioral tasks examples are for 3 – 5 Years olds

#### Social-Emotional

#### **Behavioral**

Attachment and self-regulation skills

Uses words to describe what someone else is thinking ("Mom thought I was asleep")

Fears imaginary things; labels happiness, fear, sadness in self

Interaction with others

Starts to share with/without prompt; imaginative play and group play

Has preferred friend; interested in "tricking" others

For more information, visit **Developmental Milestones by Scharf et al. (2016).** 

## Some Available Screening Tools

#### **Ages and Stages Questionnaire (ASQ-3)**

- For children 1 month to 5 1/2 years
- Available in 6 languages
- Takes 10-15 minutes for parents to complete and 2-3 minutes for professionals to score
- Highlights a child's strengths as well as concerns
- https://www.agesandstages.com

#### **Parents' Evaluation of Developmental Status (PEDS)**

- For children 0 to 8 years and available in 9+ languages
- Takes 2 minutes to administer and score
- https://www.pedstest.com/

#### **Early Childhood Screening Assessment (ECSA)**

- For children 1½ 5 years old and available in 3 languages
- Takes 5 10 minutes to complete
- Is focused on social-emotional development
- https://medicine.tulane.edu/centers-institutes/tecc

#### Survey of Wellbeing of Young Children (SWYC)

- For children under 5 years and available in 5 languages
- Takes 5 10 minutes to complete
- Is focused on developmental milestones, behavioral/emotional development, family risk factors, autism-specific screening
- https://www.tuftschildrenshospital.org/The-Survey-of-Wellbeing-of-Young-Children/Overview

\*The use of validated and standardized screening measures leads to accurate detection of developmental problems.

For more information, visit **Screening Tools by AAP**.



## **Early Screening Barriers**

#### What are early screening barriers?

- Limited resources across settings
- · Confusing service systems
- Lack of information and education
- Callous about risk impact
- Conflicting beliefs and attitudes
- Lack of culturally appropriate screening tools



#### What are some individual level barriers?

- Confusion about available services (Bates et al., 2014)
- Time constraints delays referrals to early intervention (Boh & Johnson, 2018)
- Lack of knowledge of available services (Singh et al., 2015)
- Unconcern about risk impact (Singh et al., 2015)
- Personal cultural beliefs against early screening (Bates et al., 2014)

#### What are some family level barriers?

- Unconcern about risk impact (Singh, 2015)
- Confusion about available services (Bates et al., 2014)
- Caregiver low assignment of significance to early screening (Bates et al., 2014)

#### What are some community and society level barriers?

- Community
  - Lack of culturally appropriate screening tools (Wijedasa, 2012)
  - Limitation of early intervention services in resource-poor settings (van der Merwe et al., 2019)
  - Inaccessibility due to limited facilities and resources (van der Merwe et al., 2019)
- Society
  - Lack of easily accessible healthcare services (Hirai, 2018)
  - Limitation of early intervention services in resource-poor settings (van der Merwe et al., 2019)



## Early Screening Facilitators

#### What are early screening Facilitators?

- Meaningful provider-parent relationship
- Positive attitudes and affordable preventative care
- Effective early screening programs
- Increase collaboration
- Accessible screening tools

#### What are some individual level Facilitators?

- Person-centered care (Bates et al., 2014)
- Valuable relationship (Bates et al., 2014)
- Positive provider attitudes and beliefs (Boh & Johnson, 2018)
- Cultural responsive preventative care
- Acknowledgement of reported parental concerns by providers (Chung et al., 2011)

#### What are some family level Facilitators?

- Positive childcare provider attitudes and beliefs (Boh & Johnson, 2018)
- Valuable relationship and collaboration (Bates et al., 2014)

#### What are some community and society level Facilitators?

- Community
  - Effective early screening programs (Harris, 2016)
  - · Accessible and adequate screening tools (Chiang et al., 2013; Hodges, 2016; Iyer, 2017)
  - Use of assistive technology in the screening efforts (Nelson, 2019)
- Society
  - Lack of easily accessible healthcare services (Hirai, 2018)
  - Limitation of early intervention services in resource-poor settings (van der Merwe et al., 2019)
  - Affordable preventative care (Hirai, 2018)

#### **Note**

 Identified facilitating factors should be drawn upon when educating community members, parents and providers on ways to better address barriers that hinder early screening while promoting early screening, referrals, and intervention.



## Tips for Parents and Caregivers

- 1. Discuss your concerns and report developmental changes and gained skills to your child's provider or educator.
- 2. Establish a good working relationship with your child's providers and communicate frequently with them.
- Request a referral for an advanced neurodevelopmental evaluation if your child's developmental screening result indicates any delays.
- **4.** Follow up with a referral, communicate barriers to access to services and utilize available community resources and share with others.
- 5. Visit the "Learn the Signs, Act Early" CDC website at <a href="https://www.cdc.gov/ncbddd/actearly/index.html">https://www.cdc.gov/ncbddd/actearly/index.html</a>
- 6. Download the Milestones Tracker App from <a href="https://www.cdc.gov/ncbddd/actearly/freematerials.html#to">https://www.cdc.gov/ncbddd/actearly/freematerials.html#to</a> olsfortrackingmilestones-2017

## Tips for Providers and Educators

- 1. Ask questions about developmental changes and attend to parents' concerns. Observe age-specific developmental skills including during parent-child interaction.
- 2. Incorporate developmental screening into your practice. See Developmental Milestones Tracker Resources for Early Childhood Educators: <a href="https://www.cdc.gov/ncbddd/actearly/Information-for-Early-Childhood-Educators.html">https://www.cdc.gov/ncbddd/actearly/Information-for-Early-Childhood-Educators.html</a>
- Obtain, document and maintain the developmental history of all children and allow enough time during visits to fully discuss developmental concerns.
- **4.** Identify and address risk factors including early adverse childhood events, identify protective factors, child and caregiver strengths, and build on them.
- 5. Developmental disorder diagnosis is not a prerequisite for an early intervention referral.
- 6. Make timely referrals for developmental evaluation of children identified to be at risk and ensure prompt follow-up and document the referral outcomes in the medical record.
- 7. Adopt a team-based approach and collaborate with parents and other providers about children's development.
- 8. Provide family support and screening resources to the parents of the children you serve. Engage in culturally responsive practice when communicating the purpose and need of screening to parents.



## Tips for Organizational Leaders and Policy Makers

- 1. Create a system that encourages, supports, and evaluates early screening and referral to programs.
- Support implementation of universal screening of all children.
- 3. Identify and address barriers to early screening and referral.
- 4. Encourage and support the education of providers and parents on early screening and intervention.
- Allow for reimbursement of early periodic screening and intervention services performed by non-physicians and nonlicensed providers.
- **6.** Support expansion of screening services to community-based programs (e.g., food and nutritional programs).
- 7. Implement programs that promote early screening.
- 8. Implement statewide database systems that maintain screening records such as those that maintain immunization records. This will help minimize under-screening and under-referral of children who are at risk for developmental delay.

### **Helpful Resources**

#### American Academy of Pediatrics' STAR Center

Technical assistance and resources to increase rates of early screening, referral and follow-up for developmental milestones, prenatal depression, and social determinants of health. https://screeningtime.org/star-center/#/

## American Psychological Association's ACT Raising Safe Kids Program

Teaches positive parenting skills to parents and caregivers of children from birth to age 10. <a href="https://www.apa.org/act/resources/fact-sheets">https://www.apa.org/act/resources/fact-sheets</a>

## CDC's Developmental Milestone Checklist Program for WIC Program Staff

Helps WIC program staff engage parents in monitoring their children's development and support them with timely referrals when needed. https://www.cdc.gov/ncbddd/wicguide/index.html

#### CDC's Free Milestone Tracker App

Tracks children's development from age 2 months to 5 years with easy-to-use illustrated checklists. <a href="https://www.cdc.gov/ncbddd/actearly/milestones-app.html">https://www.cdc.gov/ncbddd/actearly/milestones-app.html</a>

## CDC's Free "Watch Me! Celebrating Milestones and Sharing Concerns" Training Course

Provides tools and best practices for monitoring the development of children and talking with parents.

https://www.cdc.gov/ncbddd/watchmetraining/index.html

#### CDC's "Learn the Signs. Act Early" Program

Helps caregivers track their children's development and provides information if there are concerns. https://www.cdc.gov/ncbddd/actearly/index.html

#### CDC's Milestone Checklist

Contains checklists of developmental milestones for caregivers of babies/children aged 2 months to 5 years and offers tips for parents. <a href="https://www.cdc.gov/ncbddd/actearly/pdf/checklists/Checklists-with-Tips">https://www.cdc.gov/ncbddd/actearly/pdf/checklists/Checklists-with-Tips</a> Reader 508.pdf

### **Helpful Resources Continued**

## Early Childhood Personnel Center's Curriculum Modules: Professional Standards

Integrates practice-based professional preparation standards into the work of early interventionists and early childhood special educators. <a href="https://ecpcta.org/curriculum-module/">https://ecpcta.org/curriculum-module/</a>

- Healthy Children Website Provides information and recommendations related to child health, guidance on parenting issues, and more. <a href="https://www.healthychildren.org/">https://www.healthychildren.org/</a>
- Kennedy Krieger Institute's Infant Neurodevelopment Center
  Evaluates and treats infants with a wide variety of medical issues that could put them at risk for developmental delays. <a href="www.NICU.KennedyKrieger.org">www.NICU.KennedyKrieger.org</a>
- Maryland Center for Developmental Disabilities

  Provides a compilation of early intervention resources including programs, services, education, and supports.

https://www.kennedykrieger.org/community/initiatives/resource-finder/lifespan-resources/early-years/early-intervention

- Maryland Department of Education, Division of Early
  Intervention Services If you suspect that your child has a developmental delay or disability, use the following link to locate your jurisdiction early intervention program and call.
- Maryland's Infants and Toddlers Program

  <a href="http://marylandpublicschools.org/programs/Pages/Special-Education/MITP/index.aspx">http://marylandpublicschools.org/programs/Pages/Special-Education/MITP/index.aspx</a>
- U.S. Department of Education: Infographic

  Summarizes guidance and considerations to support state staff and local practitioners in determining a child's eligibility for early intervention services remotely. Full guidance with additional resources available at:

  <a href="https://ectacenter.org/topics/earlyid/remote-eligibility-partc.asp">https://ectacenter.org/topics/earlyid/remote-eligibility-partc.asp</a>
- U.S. Department of Education's "Birth to 5: Watch Me Thrive!"

  Program Encourages healthy child development, universal developmental & behavioral screening for young children, and support for families & providers <a href="https://www2.ed.gov/about/inits/list/watch-me-thrive/index.html">https://www2.ed.gov/about/inits/list/watch-me-thrive/index.html</a>

## **Helpful Resources Continued**

#### Zero to Three: Early Development and Well-Being

Offers lessons, recommendations, and education about children's earliest relationships with caregivers.

https://www.zerotothree.org/early-development



## Parent Resources from the AAP at HealthyChildren.org

#### Developmental Milestones: 1 Month:

https://www.healthychildren.org/English/agesstages/baby/Pages/Developmental-Milestones-1-Month.aspx

#### **Developmental Milestones: 3 Months:**

https://www.healthychildren.org/English/agesstages/baby/Pages/Developmental-Milestones-3-Months.aspx



#### Developmental Milestones: 7 Months:

https://www.healthychildren.org/English/agesstages/baby/Pages/Developmental-Milestones-7-Months.aspx



#### Developmental Milestones: 12 Months:

https://www.healthychildren.org/English/agesstages/baby/Pages/Developmental-Milestones-12-Months.aspx



#### **Developmental Milestones: 2 Year Olds:**

https://www.healthychildren.org/English/agesstages/toddler/Pages/Developmental-Milestones-2-Year-Olds.aspx



#### Developmental Milestones: 3 to 4 Year Olds:

https://www.healthychildren.org/English/agesstages/toddler/Pages/Developmental-Milestones-3-to-4-Years-Old.aspx



#### **Developmental Milestones: 4 to 5 Year Olds:**

https://www.healthychildren.org/English/agesstages/preschool/Pages/Developmental-Milestones-4-to-5-Year-Olds.aspx

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