OBJECTIVES

Upon completion of this training module, early intervention staff will be able to:

1) Describe how atypical development may adversely impact the overall development of all infants and toddlers (those born prematurely, full-term, with complex medical histories, and those who have always been healthy);

2) Identify characteristics of atypical development across multiple areas of development; and

3) Determine when atypical development warrants further evaluation and/or early intervention services.

TOPICS COVERED IN THIS MODULE

- Importance of evaluating quality of development in addition to attainment of milestones
- Common concerns seen in infants born prematurely related to gross motor, fine motor, cognition, speech and language, feeding, sensory, vision, and hearing
- Considerations for cultural variance

TIME

It will take approximately 60 minutes to deliver this training module.
**Materials/Resources Needed:**

- Chart paper (optional)
- *Module 5: Atypical Development—Increasing Awareness* recorded presentation
- Copies of *Atypical Development Brainstorm: Milestones 1-6* handouts (one milestone per group of 3-4 participants)

**NOTE:** To access this module’s presentation and handouts, visit the online companion website.

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**PROCEDURE**

1) Share the session title and objectives with participants (displayed on chart paper or directly from online companion website).

2) To activate participant’s prior knowledge, present the following Think About: *Is there any way for a child to be eligible for the Maryland Infants and Toddlers Program if developmental milestones are not met and the child does not have a high probability medical condition?* [Answer: Yes—if an aspect of the child’s development is atypical in quality.]

3) Play the *Module 5: Atypical Development—Increasing Awareness* presentation via the online companion website.

4) At the end of the presentation, divide the group into teams of three to four people, mixing disciplines if possible.
   - Distribute milestone list to teams, each team receives a list of six milestones.
   - Explain the directions:
     - Review the list of six milestones. Each milestone includes a description and one possible example of an atypical presentation.
     - As a team, brainstorm three additional ways in which a child may perform each of the skills in an atypical manner.
     - Give the group 15 minutes to brainstorm.
     - When time is up, have a representative from each team report out to the larger group (see Facilitator’s Key on pages 3-5).

5) To bring closure to the training session, present the following Take Away: *It is essential to look at how a child does things in addition to whether or not the child achieves a milestone.*

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The examples provided in the Facilitator’s Key for atypical presentation of the milestones are not all inclusive. There are many other possible correct responses.
Facilitator’s Key for Atypical Development Brainstorm Activity

Milestone 1: Tracks horizontally & vertically

**Age:** 2 months  
**Domain:** Cognitive

**Administration:** Place the baby in supine with head in midline. Position the rattle 8-10 inches in front of the baby’s face. Once the baby fixes on the rattle, slowly move it to the left. Observe to see if the baby follows with his eyes and/or head. Once the baby has followed as far as he will go, slowly move the rattle to the right. Observe to see if the baby follows with his eyes and/or head. Gradually move the rattle up and then down to see if the baby will follow with his eyes and/or head vertically. If the baby does not track the rattle horizontally and vertically, try another object. The goal is to identify if the baby tracks horizontally and vertically as doing so is one major strategy that the baby uses to learn about his world. If the baby has difficulty tracking, try dimming the lights in the room.

**Pass:** The item is passed if the infant will follow the ring (or another object) at least 60° horizontally and 45° vertically.

**Atypical:** The item is considered atypical if the infant only track horizontally in one direction. The item may also be considered atypical if:

1. **Nystagmus is observed.**
2. **The child turns easier to one side than the other side, appearing to have difficulty turning his neck on one side.**
3. **Plagiocephaly is seen with the head flattened on the right, making it difficult to turn to the left.**

Milestone 2: Swallows strained or pureed foods

**Age:** 6 months  
**Domain:** Adaptive

**Administration:** Ask the parent “Has _____ started to eat baby food or cereal?” If so, ask the parent to tell you what types of foods he is eating, inquire about the consistency of the food, and ask about the quantity eaten. The baby does not need to swallow much food to pass the item; the child needs to have simply demonstrated the ability to swallow strained or pureed foods. Also ask if the child has any problems such as gagging, tongue thrusting, excessive spitting, or vomiting when eating.

**Pass:** The item is passed if the child can swallow at least half of the strained/pureed food presented on a small spoon.

**Atypical:** The item is considered atypical if the baby strongly and involuntarily bites the spoon. The item may also be considered atypical if:

1. **The child chokes when eating.**
2. **The child’s head droops forward with her chin resting on her chest.**
3. **The child keeps her tongue retracted.**
Milestone 3: Builds 2-cube tower

**Age:** 12 months

**Domain:** Fine Motor

**Administration:** Place 10 cubes on a flat surface (e.g., table). Stack four cubes in a tower. Move the remaining cubes closer to the child. Tell him to build a tower like yours.

**Pass:** The item is passed if the child builds a tower of at least two cubes.

**Atypical:** The item is considered atypical if the child consistently uses one hand to the exclusion of the other; although hand preference may emerge as early as 11 months, a child should not totally exclude use of the other hand. The item may also be considered atypical if:

1. The child keeps hand fisted.
2. The child consistently overshoots when trying to place the second cube on top of the first cube, eventually stacking two cubes but with much effort.
3. Drooling is noted with tongue protrusion when concentrating on stacking the cubes.

Milestone 4: Parallel play

**Age:** 21 months

**Domain:** Social-Emotional

**Administration:** Ask the parent if the child ever plays alongside other children. If so, ask how long he can play alongside another child. Also ask if the play is generally peaceful or if it includes mostly fighting over toys.

**Pass:** The item is passed if the child can play alongside another child for at least 10 minutes with minimal to no fighting over the toys. The children do not need to play together with the toys to pass this item. The children may share toys but this is not a requirement for a pass.

**Atypical:** The item is considered atypical if the child plays with the toys in a perseverative manner, for instance, spinning the wheels of a car. The item may also be considered atypical if:

1. Mom expresses a concern because her child never displays pretend play, even when playing next to his friend who does pretend.
2. The child engages in stereotypical hand flapping during play.
3. The child has difficulty attending to one object for the same amount of time as his peers, seems to change toys every 10-15 seconds.
Facilitator’s Key for Atypical Development Brainstorm Activity (cont.)

Milestone 5: Goes up steps alternating feet

**Age:** 30 months

**Domain:** Gross Motor

**Administration:** Bring the child to the stairs and encourage him to go up the steps. Stay near to catch him if he begins to fall.

**Pass:** The item is passed if the child goes up the steps, placing only one foot on each step, alternating feet as he goes up the steps. The child does not need to be able to come down the steps alternating feet to pass this item.

**Atypical:** The item is considered atypical if the child stays on tip-toes while using stairs, never coming down on flat feet. The item may also be considered atypical if:

1. **The child keeps one leg stiff while going up the steps.**
2. **The child appears to pull herself up the stairs using the hand rail rather than using her legs which appear a little floppy.**
3. **The child keeps one arm in a “high guard” position with retraction at the shoulder and fisting of the hand.**

Milestone 6: 250-word vocabulary

**Age:** 36 months

**Domain:** Language

**Administration:** Observe the child throughout the evaluation to determine whether the child has an extensive spontaneous vocabulary. Ask the parent to estimate how many words the child knows. Ask the parent if the child seems to use new words on a regular basis.

**Pass:** The item is passed if the child has an extensive and growing vocabulary that he uses to express meaningful statements and questions. The actual number of words will be too many to actually list or count.

**Atypical:** The item is considered atypical if the child has difficulty articulating p, b, m, w, or h. The item may also be considered atypical if:

1. **The child exhibits frustration when trying to talk.**
2. **The child never makes eye contact when talking.**
3. **All of the child’s speech is echolalic in nature.**