

18 Vision Development Milestones From Birth to Baby's First Birthday

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About this Tool:

- This document is a vision screening tool for Early Head Start, Parents as Teachers, and other early care and education programs.
- This tool includes vision milestones in order of typical development.
- The 1st column lists the age.
- The 2nd column lists the milestones typically expected to occur for the age.
- The 3rd column lists the questions to ask.
- The 4th column lists Next Steps when a referral is required. It also provides activities that parents and caregivers can do to help with the milestones.
- Because each child develops differently and may meet the vision milestones at different ages, vision milestones may vary up to 6 weeks; some questions provide ages for rescreening before referring.
 - **Although milestones may vary up to 6 weeks, if baby's eyes appear to be constantly misaligned (possible strabismus) at age 2 months or older, refer immediately for an eye examination.**
- When using this tool with children who were born prematurely and have no health challenges, adjust chronological age to the corrected age* and use this tool based on corrected age (see above box). Visual development milestones may be delayed if babies have health challenges (i.e., genetic syndromes, neurologic and metabolic conditions, etc.). For these children, use vision screening results from the baby's primary care provider or eye examination results from the baby's eye care professionals to meet your vision screening mandate.

*To calculate "corrected age", subtract the number of weeks born before 40 weeks of gestation from the chronological age. For example, chronological age = 6 months (24 weeks). Child born at 28 weeks gestation. 40 weeks minus 28 weeks = 12 weeks. Chronological age of 24 weeks minus 12 weeks equal 12 weeks (3 months). Corrected age is 3 months. You may find this age calculator helpful:
https://mymonthlycycles.com/premature_baby_age_calculator.jsp

Instructions:

1. Visual skills typically develop in a particular order. To determine if the baby has met all vision milestones, begin with the first milestone on Page 2 regardless of baby's age for the first screening. Do not skip to the chronological or corrected age of the baby you are screening. If you use this tool multiple times with a child, and the child did not require a referral, begin the next screening with the milestone matching the child's chronological or corrected age.
2. Check the appropriate boxes in the "Questions" column. Some will require rescreening if the vision milestone has not been met.
3. Complete the "Questions" column of the table before completing the Pass/Rescreen/Refer Documentation pages beginning on page 10. This tool **and/or** the Pass/Rescreen/Refer Documentation can be scanned into electronic medical records and included in the baby's hard file for record-keeping purposes.
4. Use this tool monthly throughout baby's first year to review vision development milestones.

AGE <i>(Milestones may vary up to 6 weeks.)</i>	MILESTONE	QUESTIONS	NEXT STEPS
<p>Birth through 1st month</p>  <p>Image from BabyCentre: https://www.babycentre.co.uk/11048954/how-your-baby-learns-to-explore-photos</p> <p><i>Picture 1 – Baby looks at object 8 to 15 inches away from face.</i></p>  <p>Image from Zero to Three: https://www.zerotothree.org/resources/164-play-activities-for-birth-to-12-months</p> <p><i>Picture 2 – Passing a patterned object within 8 to 15 inches of baby's face.</i></p>	<ol style="list-style-type: none"> Baby begins to focus on lights, faces, and objects 8 to 15 (20.32 – 38.1 cm) inches away from his/her face. Baby begins to follow slowly moving lights, faces, and objects at near. <p>NEXT MILESTONE DURING AGE 2ND AND 3RD MONTHS</p>	<ol style="list-style-type: none"> Does baby focus on lights, faces, and objects 8 to 15 inches (20.32 – 38.1 cm) in front of his/her face? <ul style="list-style-type: none"> <input type="checkbox"/> Yes (pass). <input type="checkbox"/> Not Yet (rescreen within 6 weeks). Date for rescreen: _____ <input type="checkbox"/> If “No” after rescreening, move to Next Steps. Is baby beginning to follow slowly moving lights, faces, and objects with his/her head and eyes? <ul style="list-style-type: none"> <input type="checkbox"/> Yes (pass). <input type="checkbox"/> Not Yet (rescreen within 6 weeks). Date for rescreen: _____ <input type="checkbox"/> If “No” after rescreening, move to Next Steps. 	<ul style="list-style-type: none"> <input type="checkbox"/> Refer to baby’s primary health care provider for further evaluation and to coordinate a referral for an eye examination. <input type="checkbox"/> Refer to Birth to 3 Early Intervention program. <input type="checkbox"/> Activities parents and caregivers can do: <ul style="list-style-type: none"> • Hold your baby in front of you, look at your baby, and slowly move your head from side to side. Play together and have fun! • Hold a patterned, high-contrast toy within 8 to 15 inches (20.32 – 38.1 cm) of your baby’s face. Slowly move the object up and down or side to side. Play together and have fun! • Place a small rattle or colorful, plastic right in your baby’s hands and gently shake your baby’s hands in front of your baby’s face. Play together and have fun!

AGE <i>(Milestones may vary up to 6 weeks.)</i>	MILESTONE	QUESTIONS	NEXT STEPS
<p>During 2nd and 3rd months</p>  <p>2 Months - Begins to smile at people</p> <p>Image from CDC: https://www.cdc.gov/ncbddd/actearly/milestones/photolibrary/2months.html</p> <p>Picture 5 – Lively visual communication with social smile.</p>  <p>Image from Lea Hyvärinen, MD, PhD http://www.lea-test.fi/index.html?start=en/assesme/lowvisio/index.html</p> <p>Picture 6 – Baby turns head away from the parent.</p>	<p>3. Baby begins to notice his/her hands.</p> <p>4. Baby makes eye contact with parent or caregiver.</p> <p>5. Baby follows moving lights, faces, people, and objects with both eyes together.</p> <p>6. Baby has a social smile.</p> <p>IF BABY IS AGE 3 TO 4 MONTHS, ALSO DO THE FOLLOWING MILESTONE</p>	<p>3. Is baby aware of his/her hands during the 2nd month? <input type="checkbox"/> Yes (pass). <input type="checkbox"/> No (refer and move to Next Steps).</p> <p>4. Does baby look directly at parent's or caregiver's eyes? <input type="checkbox"/> Yes (pass). <input type="checkbox"/> Not Yet (rescreen within 6 weeks). Date for rescreen: _____ <input type="checkbox"/> If "No" after rescreening, move to Next Steps.</p> <p>5. Is baby following moving lights, faces, people, and objects with both eyes together? <input type="checkbox"/> Yes (pass). <input type="checkbox"/> Not Yet (rescreen within 6 weeks). Date for rescreen: _____ <input type="checkbox"/> If "No" after rescreening, move to Next Steps.</p> <p>6. Is baby smiling at his/her parent or caregiver by age 3 months? <input type="checkbox"/> Yes (pass). <input type="checkbox"/> No (Refer and move to Next Steps).</p>	<p><input type="checkbox"/> Refer to baby's pediatric primary health care provider for further evaluation and to coordinate a referral for an eye examination.</p> <p><input type="checkbox"/> Refer to Birth to 3 Early Intervention program.</p> <p><input type="checkbox"/> Activities parents and caregivers can do:</p> <ul style="list-style-type: none"> • Look at your baby with his/her face about 8 to 15 inches from your face, wait for your baby to look at your face; and smile, sing, or talk to your baby. Play together and have fun! • Hold a favorite toy, bottle, or patterned and high-contrast object within 8 to 15 inches (20.32 – 38.1 cm) of your baby's face. Slowly move the object up and down or side to side. Play together and have fun!

AGE <i>(Milestones may vary up to 6 weeks.)</i>	MILESTONE	QUESTIONS	NEXT STEPS
<p>During 3rd and 4th months</p>  <p>http://www.howwemontessori.com/how-we-montessori/2011/07/grasping-and-in-hand-materials.html</p> <p><i>Picture 7 – Baby becomes aware of hands.</i></p>  <p>http://www.flynnleitch.com/2017/02/</p> <p><i>Picture 8 – Baby explores hands with mouth.</i></p>	<p>7. Baby watches his/her hand movements.</p> <p>8. Baby reaches for objects or parent's or caregiver's face.</p> <p>9. Baby grasps and holds objects in his/her hands.</p> <p>10. Baby brings objects to his/her mouth.</p> <p>11. Baby moves eyes from person to person or object to object.</p> <p>NEXT MILESTONE AT AGE 5 MONTHS</p>	<p>7. Does baby watch his/her hands? <input type="checkbox"/> Yes (pass). <input type="checkbox"/> Not Yet (rescreen within 6 weeks). Date for rescreen: _____ <input type="checkbox"/> If "No" after rescreening, move to Next Steps.</p> <p>8. Does baby reach for objects or parent's or caregiver's face? <input type="checkbox"/> Yes (pass). <input type="checkbox"/> Not Yet (rescreen within 6 weeks). Date for rescreen: _____ <input type="checkbox"/> If "No" after rescreening, move to Next Steps.</p> <p>9. Does baby grasp and hold an object in his/her hands? <input type="checkbox"/> Yes (pass). <input type="checkbox"/> Not Yet (rescreen within 6 weeks). Date for rescreen: _____ <input type="checkbox"/> If "No" after rescreening, move to Next Steps.</p> <p>10. Does baby bring objects to his/her mouth by age 4 months? <input type="checkbox"/> Yes (pass). <input type="checkbox"/> No (refer and move to Next Steps).</p> <p>11. Does baby shift his/her eyes from person to person or object to object during age 4 months? <input type="checkbox"/> Yes (pass). <input type="checkbox"/> No (refer and move to Next Steps).</p>	<p><input type="checkbox"/> Refer to baby's pediatric primary health care provider for further evaluation and to coordinate a referral for an eye examination.</p> <p><input type="checkbox"/> Refer to Birth to Three Early Intervention program.</p> <p><input type="checkbox"/> Activities parents and caregivers can do:</p> <ul style="list-style-type: none"> • With baby's back on a flat surface, gently use baby's elbows to bring hands together at the middle of baby's chest. Play together and have fun! • Use age-appropriate baby toys to help baby use his/her hands to explore. Play together and have fun! • Hold a toy in one hand toward the right side of baby's face and shake or activate the toy. Repeat with a different toy in the other hand toward the left side of baby face. Alternate between toys, shaking or activating one toy at a time.

AGE <i>(Refer if eyes not straight by the 5th mo.)</i>	MILESTONE	QUESTIONS	NEXT STEPS
<p>By 5th month</p>  <p>Image from: http://britishmuslim-magazine.com/wp-content/uploads/2016/07/baby.jpg</p> <p><i>Picture 9 – Straight eyes.</i></p>  <p>Image from: http://www.allaboutvision.com/conditions/strabismus.htm</p> <p><i>Picture 10 - Inward constant strabismus example.</i></p>	<p>12. Baby's eyes appear straight.</p> <p>13. Neither of baby's eyes turn up, down, in, or out for several minutes at a time, either constantly* or intermittently**</p> <p><i>*Constantly and constant means the misalignment is present all the time and could be up, down, in, or out (see Pictures 9 and 10 on left as examples).</i></p> <p><i>**Intermittently and intermittent means an eye turns in, out, up, or down, only for a short time.</i></p> <p>NEXT MILESTONE AT AGE 6 MONTHS</p>	<p>12. Are baby's eyes straight?</p> <p><input type="checkbox"/> Yes (pass).</p> <p><input type="checkbox"/> No, (refer and move to Next Steps).</p> <p>13. Do either of baby's eyes ever appear to constantly or intermittently turn up, down, in, or out beginning at age 5 months?</p> <p><input type="checkbox"/> No (pass).</p> <p><input type="checkbox"/> Yes, (refer and move to Next Steps).</p>	<p><input type="checkbox"/> If you think baby's eyes are not straight, or an eye appears to cross or drift outward, after age 4 months, immediately refer to an eye care professional for an eye examination.</p> <p><input type="checkbox"/> Refer to Birth to Three Early Intervention program.</p>

AGE <i>(Milestones may vary up to 6 weeks.)</i>	MILESTONE	QUESTIONS	NEXT STEPS
<p>During 6th and 7th months</p>  <p>http://smartmomcenter.com/when-do-babies-crawl/</p> <p><i>Picture 11 – Goal-directed hand arm movement to reach toy.</i></p>  <p>http://www.fisher-price.com/en_US/playtime-guide/6-months/index.html</p> <p><i>Picture 12 – Goal-directed hand arm movement to reach toy.</i></p>	<p>14. Baby purposefully reaches for objects.</p> <p>15. Baby follows objects with both his/her eyes at near (1 foot [30.48 cm]) and far (greater than 6 feet [182.88]).</p> <p>NEXT MILESTONE AT AGE 8 MONTHS</p>	<p>14. Does baby purposefully reach for objects baby wants?</p> <p><input type="checkbox"/> Yes (pass).</p> <p><input type="checkbox"/> Not Yet (rescreen within 6 weeks). Date for rescreen: _____</p> <p><input type="checkbox"/> If “No” after rescreening, move to Next Steps.</p> <p>15. Does baby follows objects with both eyes at near (1 foot [30.48 cm]) and far (greater than 6 feet [182.88]) by age 7 months?</p> <p><input type="checkbox"/> Yes (pass).</p> <p><input type="checkbox"/> No (refer and move to Next Steps).</p>	<p><input type="checkbox"/> Refer to baby’s pediatric primary health care provider for further evaluation and to coordinate a referral for an eye examination.</p> <p><input type="checkbox"/> Refer to Birth to Three Early Intervention program.</p> <p><input type="checkbox"/> Activities parents and caregivers can do:</p> <ul style="list-style-type: none"> • Place favorite toy or other object close to, but slightly out of reach, of baby and encourage baby to reach for the toy or object. <ul style="list-style-type: none"> ▪ Give baby the toy/object after he/she reaches for it so he/she can play with the toy or object. Play together and have fun!

AGE <i>(Milestones may vary up to 6 weeks.)</i>	MILESTONE	QUESTIONS	NEXT STEPS
<p>During 11th and 12th months</p>  <p>https://www.ecda.gov.sg/growatbeanstalk/Pages/Understandingandlearningabouttheworld_Birthto2years.aspx</p> <p><i>Picture 15 – Baby points to picture in a book.</i></p>  <p>https://twintalkblog.net/tag/11-month-old-twins/</p> <p><i>Picture 16 – Baby points to picture in book.</i></p>	<ul style="list-style-type: none"> • <i>Use this milestone if baby has been exposed to books:</i> <p>18.A. Baby uses his/her index finger to point to pictures in a book.</p> <p>MOVE TO NEXT MILESTONE IF BABY IS <u>NOT</u> EXPOSED TO BOOKS</p>	<p>18.A. When given a book with pictures, does baby use his/her index finger and point to pictures in the book?</p> <p><input type="checkbox"/> Yes (pass) <input type="checkbox"/> No (refer and move to Next Steps).</p>	<p><input type="checkbox"/> Refer to baby's pediatric primary health care provider for further evaluation and to coordinate a referral for an eye examination.</p> <p><input type="checkbox"/> Refer to Birth to 3 Early Intervention program.</p> <p><input type="checkbox"/> Activities parents and caregivers can do:</p> <ul style="list-style-type: none"> • Look at a book with pictures with baby. <ul style="list-style-type: none"> ▪ Point to simple, high-contrast pictures in an age-appropriate children's book and name the picture. Remove hand. Ask your baby where is X (using same picture)? ▪ If your baby points to the same picture, praise baby. ▪ If your baby does not point to the same picture, again point to the same picture and name the picture. Then, gently move baby's finger to the same picture and name picture. Make it fun! • If baby does not respond to the book, try a different book. Perhaps baby is not interested in the first book.

AGE <i>(Milestones may vary up to 6 weeks.)</i>	MILESTONE	QUESTIONS	NEXT STEPS
<p>During 11th and 12th months</p>  <p>Image from: http://chasingcheerios.blogspot.com/2010/09/putting-objects-in-large-container.html</p> <p>Picture 17 – Baby looking for object in container.</p>	<ul style="list-style-type: none"> • <i>Use this milestone if baby has <u>not</u> been exposed to books:</i> <p>18.B. Baby looks for object dropped in containers.</p>	<p>18.B. When an object (such as a toy block) is dropped into a container, does baby look in the container for the object?</p> <p><input type="checkbox"/> Yes (pass) <input type="checkbox"/> No (refer and move to Next Steps).</p>	<p><input type="checkbox"/> Refer to baby's pediatric primary health care provider for further evaluation and to coordinate a referral for an eye examination.</p> <p><input type="checkbox"/> Refer to Birth to 3 Early Intervention.</p> <p><input type="checkbox"/> Activities parents and caregivers can do:</p> <ul style="list-style-type: none"> • Use a block or favorite toy with a container nearby. Talk with your baby about the block or favorite toy. Drop the block or favorite toy and ask your baby where the X went. <ul style="list-style-type: none"> ▪ If your baby does not look into the container, you look into the container and say "Here is X" and repeat 3 or 4 times. Make it a game.

Child's Name: _____ DOB: _____ Age: _____

Pass/Rescreen/Refer Documentation

Birth through 1st Month				
1. Does baby focus on lights, faces, and objects 8 to 15 inches (20.32 – 38.1 cm) in front of his/her face?	Screen Date:		Rescreen Date:	
<i>Comments/ Observations:</i>	<input type="checkbox"/> Pass	<input type="checkbox"/> Rescreen	<input type="checkbox"/> Pass	<input type="checkbox"/> Refer health care provider <input type="checkbox"/> Refer EI
2. Is baby beginning to follow slowly moving lights, faces, and objects with his/her head and eyes?	Screen Date:		Rescreen Date:	
<i>Comments/ Observations:</i>	<input type="checkbox"/> Pass	<input type="checkbox"/> Rescreen	<input type="checkbox"/> Pass	<input type="checkbox"/> Refer health care provider <input type="checkbox"/> Refer EI
During 2nd and 3rd Months				
3. Is baby aware of his/her hands during the 2 nd month?	Screen Date:			
<i>Comments/ Observations:</i>	<input type="checkbox"/> Pass	<input type="checkbox"/> Refer health care provider <input type="checkbox"/> Refer EI		
4. Does baby look directly at parent's or caregiver's eyes?	Screen Date:		Rescreen Date:	
<i>Comments/ Observations:</i>	<input type="checkbox"/> Pass	<input type="checkbox"/> Rescreen	<input type="checkbox"/> Pass	<input type="checkbox"/> Refer health care provider <input type="checkbox"/> Refer EI
5. Is baby following moving lights, faces, people, and objects with both eyes together?	Screen Date:		Rescreen Date:	
<i>Comments/ Observations:</i>	<input type="checkbox"/> Pass	<input type="checkbox"/> Rescreen	<input type="checkbox"/> Pass	<input type="checkbox"/> Refer health care provider <input type="checkbox"/> Refer EI
6. Is baby smiling at his/her parent or caregiver by age 3 months?	Screen Date:			
<i>Comments/ Observations:</i>	<input type="checkbox"/> Pass	<input type="checkbox"/> Refer health care provider <input type="checkbox"/> Refer EI		

Screener's Signature: _____ Date: _____

Child's Name: _____ DOB: _____ Age: _____

During 3 rd and 4 th Months				
7. Does baby watch his/her hands?	Screen Date:		Rescreen Date:	
<i>Comments/ Observations:</i>	<input type="checkbox"/> Pass	<input type="checkbox"/> Rescreen	<input type="checkbox"/> Pass	<input type="checkbox"/> Refer health care provider <input type="checkbox"/> Refer EI
8. Does baby reach for objects or parent's or caregiver's face?	Screen Date:		Rescreen Date:	
<i>Comments/ Observations:</i>	<input type="checkbox"/> Pass	<input type="checkbox"/> Rescreen	<input type="checkbox"/> Pass	<input type="checkbox"/> Refer health care provider <input type="checkbox"/> Refer EI
9. Does baby grasp and hold an object in his/her hands?	Screen Date:		Rescreen Date:	
<i>Comments/ Observations:</i>	<input type="checkbox"/> Pass	<input type="checkbox"/> Rescreen	<input type="checkbox"/> Pass	<input type="checkbox"/> Refer health care provider <input type="checkbox"/> Refer EI
10. Does baby bring objects to his/her mouth by age 4 months?	Screen Date:			
<i>Comments/ Observations:</i>	<input type="checkbox"/> Pass	<input type="checkbox"/> Refer health care provider <input type="checkbox"/> Refer EI		
11. Does baby shift his/her eyes from person to person or object to object during age 4 months?	Screen Date:			
<i>Comments/ Observations:</i>	<input type="checkbox"/> Pass	<input type="checkbox"/> Refer health care provider <input type="checkbox"/> Refer EI		

Screener's Signature: _____ Date: _____

Child's Name: _____ DOB: _____ Age: _____

By 5 th Month			
12. Are baby's eyes straight?	Screen Date:		
<i>Comments/ Observations:</i>	<input type="checkbox"/> Pass	<input type="checkbox"/> Refer eye care provider <input type="checkbox"/> Refer EI	
13. Do either of baby's eyes ever appear to constantly or intermittently turn up, down, in, or out beginning at age 5 months?	Screen Date:		
<i>Comments/ Observations:</i>	<input type="checkbox"/> Pass	<input type="checkbox"/> Refer eye care provider <input type="checkbox"/> Refer EI	
During 6 th and 7 th Months			
14. Does baby purposefully reach for objects baby wants?	Screen Date:		Rescreen Date:
<i>Comments/ Observations:</i>	<input type="checkbox"/> Pass	<input type="checkbox"/> Rescreen	<input type="checkbox"/> Pass <input type="checkbox"/> Refer health care provider <input type="checkbox"/> Refer EI
15. Does baby follows objects with both eyes at near (1 foot [30.48 cm]) and far (greater than 6 feet [182.88]) by age 7 months?	Screen Date:		
<i>Comments/ Observations:</i>	<input type="checkbox"/> Pass	<input type="checkbox"/> Refer health care provider <input type="checkbox"/> Refer EI	

Screener's Signature: _____ Date: _____

Child's Name: _____ DOB: _____ Age: _____

During 8th, 9th, or 10th Months				
16. Does baby recognize family members and/or caregivers and have a welcoming smile before hearing his/her voices or seeing his/her smiles?	Screen Date:		Rescreen Date:	
<i>Comments/ Observations:</i>	<input type="checkbox"/> Pass	<input type="checkbox"/> Rescreen at age 9 months	<input type="checkbox"/> Pass	<input type="checkbox"/> Refer health care provider <input type="checkbox"/> Refer EI
	Screen Date:		9 month Rescreen Date:	
	<input type="checkbox"/> Pass	<input type="checkbox"/> Rescreen at age 10 months	<input type="checkbox"/> Pass	<input type="checkbox"/> Refer health care provider <input type="checkbox"/> Refer EI
			10 month Rescreen Date:	
<i>Comments/ Observations:</i>	Screen Date:		Rescreen Date:	
	<input type="checkbox"/> Pass	<input type="checkbox"/> Rescreen at age 9 months	<input type="checkbox"/> Pass	<input type="checkbox"/> Refer health care provider <input type="checkbox"/> Refer EI
	Screen Date:		9 month Rescreen Date:	
			10 month Rescreen Date:	
<input type="checkbox"/> Pass		<input type="checkbox"/> Refer health care provider <input type="checkbox"/> Refer EI		
		<input type="checkbox"/> Pass		<input type="checkbox"/> Refer health care provider <input type="checkbox"/> Refer EI

Screener's Signature: _____ Date: _____

Child's Name: _____ DOB: _____ Age: _____

During 11th and 12th Months – If baby has been exposed to books		
18.A. When given a book with pictures, does baby use his/her index finger and point to pictures in the book?	Screen Date:	
<i>Comments/ Observations:</i>	<input type="checkbox"/> Pass <input type="checkbox"/> Refer health care provider <input type="checkbox"/> Refer EI	
During 11th and 12th Months – If baby has NOT been exposed to books		
18.B. When an object (such as a toy block) is dropped into a container, does baby look in the container for the object?	Screen Date:	
<i>Comments/ Observations:</i>	<input type="checkbox"/> Pass <input type="checkbox"/> Refer health care provider <input type="checkbox"/> Refer EI	

Screener's Signature: _____ Date: _____

Expert Contributors:

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**National Center
for Children's Vision
and Eye Health**

Prevent Blindness