

Motor Milestones by 3 Months

Gross Motor Skills

- Laying on back:
 - Kick legs together and alternately
 - Reach for/ bat at toys held over head in midline with each arm together and alternately
- Laying on tummy:
 - Turn head from cheek to cheek
 - Lift head off of surface using elbows for support
 - Sometimes rolls from tummy to back
- In sitting:
 - Able to hold head upright and in midline briefly with trunk supported (also on an adult's shoulder)
 - Able to sit with support at the hips with tummy off of legs briefly
- Briefly support weight through both feet when held in standing position

Fine Motor Skills

- Open and close hands
- Grab object placed in palm with tight grip using all fingers
- Hold object placed in hand for at least 30 seconds
- Manipulate object in hand (shake a rattle, for example)
- Bring hands to mouth

Visual-Motor Skills

- Track a toy from one side to the other and back while laying on back
- Looks at their own hands
- Looks at faces intently
- Extend arms towards a toy held in midline

Atypical Behaviors by the End of 3 Months of Age

- Arching spine
- Limited movement in any one arm or leg (or multiple limbs)
- Does not grasp or release objects
- Does not perform alternating leg movements
- Does not push through feet in supported standing
- Does not follow toys or faces with eyes
- Does not smile or babble
- Does not support head well in sitting or when held against an adult
- Does not bring hands or objects to mouth
- Holds head to one side with limited ability to turn to the other

Sources

Centers for Disease Control and Prevention (www.cdc.gov)

Toby Long and Kathy Toscano. *Handbook of Pediatric Physical Therapy*. Lipincott Williams & Wilkins: 2002.

M. Rhonda Folio and Rebecca R. Fewell. *Peabody Developmental Motor Scales Assessment*. Pro-Ed: 1998.

Motor Milestones by 6 Months

Gross Motor Skills

- Laying on back:
 - Grab feet with hands
 - Roll from back to either side
- Laying on tummy:
 - Will raise head and shoulders off of floor using forearms when on their tummy
 - “Swim” on tummy (arms and legs come off the ground in alternating movements)
 - Push up onto straight arms and lift shoulders and chest off surface briefly
- In sitting:
 - Will pull on your hands to go from from lying on back to sitting
 - Able to keep head in midline and reach for toys when in supported sitting
 - Able to sit with support at hips or by using own hands to prop
 - MAY be able to sit without any assistance for up to 1 minute
- Weight shifting from one side to the other to reach for toys now seen in both tummy lying and in sitting
- Supports weight on flat feet and straight legs with assistance for balance

Fine Motor Skills

- Assist in holding bottle during feeding
- Begins to transfer objects from one hand to the other
- Rakes with fingers to collect small objects
- Mouths toys or other objects

Visual-Motor Skills

- Bring hands together to grab and then play with toy
- Extends arms fully to reach for toys held above head in midline when laying on back

Atypical Behaviors by the End of 6 Months of Age

- Limited movement seen in tummy lying
- Does not reach for toy in any posture
- Does not sit erect, even with support
- Reaches only with one hand
- Unable to control head when pulled from lying on back to sitting
- Seems very stiff or very floppy
- Does not laugh or enjoy being around people
- Seems overly sensitive to noises
- Maintains head to one side with limited ability to turn to the other
- Refuses to cuddle

Sources

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National Network for Child Care- NNCC. Powell, J. and Charles A. Smith, PhD.(1994)

Motor Milestones by 9 Months

Gross Motor Skills

- Roll from back to stomach; stomach to back
- Scoot forward on stomach (commando crawl)
- Go from stomach lying to quadruped (crawl position) without help
- Able to reach outside of their center of gravity to grab toy without losing balance in sitting
- Able to manipulate toy with both hands while sitting without support
- Scoot and pivot on bottom when in sitting
- Creep on hands and knees at least 5 feet forward
- Pull to standing on a stable surface from sitting position

Fine Motor Skills

- Grab toy with thumb and first 2 fingers with visible space between toy and palm
- Crumples paper with hands
- Rakes small toys or food with fingers only (no palm)
- Smoother transfer of objects between hands
- Bangs and shakes objects
- Reaching is more accurate and coordinated

Visual-Motor Skills

- Transfer toy from one hand to the other
- Touch/ poke toy with one finger only
- Bang two toys together
- Clap hands together
- Holds bottle with both hands

Atypical Behaviors by the End of 9 Months of Age

- Does not attempt movement when on tummy or in quadruped
- Exclusive W-sitting
- Does not attempt to bear weight through feet in a standing position
- Drags one side of body when scooting or crawling
- Does not notice self in mirror

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Motor Milestones by 12 Months

Gross Motor Skills

- Pull to sitting position from tummy lying or quadruped using stationary objects
- Raise self to sitting from tummy lying or quadruped on arms
- Bounce on legs by bending knees while holding on with their hands for support
- Cruise along a support surface (side stepping)
- Stand independently briefly
- Take steps in a forward motion using alternating leg movements when supported under arms or at hands
- Raise self from floor to standing without using a support surface
- MAY take 3-5 steps without assistance or support

Fine Motor Skills

- When in sitting, will corral ball rolled towards them with both hands without losing balance
- Grab small object or food using pad of thumb and index finger
- Assists in dressing by raising an arm or leg
- Drinks from a cup with help
- Feeds self small finger foods
- Pokes or points with index finger

Visual-Motor Skills

- Remove untied shoes and socks
- Transfers small toys or food in / out of a cup or container
- Opens a book
- Remove a pellet from a bottle by turning bottle upside down

Atypical Behaviors by the End of 12 Months of Age

- Unable to stand on flat feet
- Does not transition in / out of positions without assistance
- Does not crawl
- Does not wave or point
- Seems overly sensitive to clothing and fights while getting dressed or diapered
- Still unable to be consoled at night time
- Does not imitate play
- Experiences a dramatic loss of skills that they once had

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Motor Milestones by 18 Months

Gross Motor Skills

- Plays on knees in 'tall kneel' (bottom off of heels)
- Creeps on hands and knees up and down stairs
- Lowers self to pick up toy and then returns to standing without losing balance
- Walking using narrow base of support and alternating arm swinging
- Walks up and down stairs with support from hand held assistance or rail, stepping up one step at a time
- May take a few steps backward
- Attempts to kick a ball with one foot
- Walks while carrying large object

Fine Motor Skills

- Throw tennis ball forward using an overhand throw
- Grab two blocks at once with one hand
- Holds a crayon with a fist grip and scribbles
- Pulls off socks, hat, etc.

Visual-Motor Skills

- Inserts shapes into shape sorter
- Drops pellets or small toys into bottle
- Stacks 2-3 blocks
- Turns book pages several at a time

Atypical Behaviors by the End of 18 Months of Age

- Moves via crawling, scooting, or rolling only
- Exclusive W-sitting
- No attempts at independent ambulation
- Avoids playing with children their age
- Experiences a dramatic loss of skills that they once had
- Seems very stiff when transitioning in / out of positions

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Motor Milestones by 24 Months

Gross Motor Skills

- Walks sideways both directions
- Walks along a narrow line with one foot in front of the other
- Running with obvious 'flight' phase (both feet leave the ground momentarily)
- Steps over low barrier without losing balance
- Kicks a ball with one foot at least 3 feet forward in the general direction of a specific target
- Climbs onto and off of furniture unassisted
- Depending on opportunity:
 - MAY jump up using 2 footed takeoff and landing
 - MAY jump down from step without help – feet may be together or apart
 - MAY walk up stairs without assistance or rail, placing 1 or both feet on one step at a time

Fine Motor Skills

- Feeds self with spoon
- Assists with self-care like washing hand and dressing
- Throws a ball underhand at least 3 feet forward
- Opens cabinets and drawers

Visual-Motor Skills

- Builds a tower of at least 6 blocks
- Turns pages 1 at a time
- Imitates vertical lines made on paper

Atypical Behaviors by the End of 24 Months of Age

- Walks only on toes
- Does not imitate actions
- When standing or walking, feet are placed wider or narrower than hips
- Falls often when walking or running
- Experiences a dramatic loss of skills that they once had
- Cannot seem to stand still or hold a position for any length of time (always moving)

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Motor Milestones from 2-3 Years

Gross Motor Skills

- Walk on a straight line on toes without heels touching the floor
- Increased running speed and coordination
- Jumps forward using a 2-footed takeoff and landing
- Jumps off tall surfaces (up to 24 inches) with 2-footed takeoff and landing
- Stands on one foot with hands on hips for several seconds
- Walks up stairs without assistance or support placing one foot on each step
- Kicks a stationary ball placed in front of them using opposite arm and leg movement
- Propels tricycle with legs without assistance
- Walks on tip toes, but not at ALL times

Fine Motor Skills

- Catch a ball with 2 hands with elbows bent or elbows straight
- Throw a ball overhand and underhand at least 7 feet forward
- Turns doorknobs
- Holds a crayon with thumb and fingers
- Manipulates clay or Playdoh

Visual-Motor Skills

- Removes screw-on lid
- Builds tower of at least 10 blocks
- Snips with scissors
- Imitates horizontal lines and circles on paper
- Strings at least 4 beads
- Imitates simple structures made from blocks
- Completes simple puzzles

Atypical Behaviors by the End of 3 Years of Age

- Does not take turns
- Persistent drooling
- Poor eye contact
- Limited interest in toys or other children
- Falls frequently with walking or running
- Cannot seem to stand still or hold a position for any length of time (always moving)
- When standing or walking, feet are placed wider or narrower ("scissoring") than hips
- Experiences a dramatic loss of skills that they once had

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Toby Long and Kathy Toscano. *Handbook of Pediatric Physical Therapy*. Lipincott Williams & Wilkins: 2002.

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Motor Milestones from 3-4 Years

Gross Motor Skills

- Stands on one foot with hands on hips without swaying for up to 5 seconds
- Stands on tip toes without swaying for up to 3 seconds
- Runs with high knee and heel lift, forward trunk lean, and arms bent and alternating across body
- Walks on balance beam or line
- Walks down stairs without assistance or support using one foot on each step
- Jumps over low barriers with 2-footed take-off and landing
- Walk a line backward
- Jumps forward several times in succession on one or two feet
- Hops on one foot
- Rides a tricycle
- Accesses most playground equipment independently

Fine Motor Skills

- Able to hit a target 5 feet away by throwing a ball under and overhand
- Grabs a writing tool with thumb and pad of index finger, 3 other fingers secured against palm (mature writing position)
- Able to button and unbutton large buttons
- Helps dress and undress self

Visual-Motor Skills

- Cuts paper into 2 pieces
- Laces a string through a few holes
- Traces / copies simple lines and shapes
- Cuts along a line
- Builds a tower with 9 blocks
- Catches a bounced ball

Atypical Behaviors by the End of 4 Years of Age

- Does not jump
- Cannot grasp crayon between thumb and fingers
- Resists dressing and toileting
- Shows no interest in interactive games
- Unable to copy simple lines and shapes
- Experiences a dramatic loss of skills that they once had

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Toby Long and Kathy Toscano. *Handbook of Pediatric Physical Therapy*. Lipincott Williams & Wilkins: 2002.

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Motor Milestones from 4-5 Years

Gross Motor Skills

- Imitates 4 sequential movements
- Stands on one foot without swaying for up to 10 seconds
- Can perform 3 complete sit ups
- Can perform a forward roll (somersault)
- Gallops (same foot leading)
- Jumps forward multiple times without loss of balance
- MAY be able to skip (alternating leading foot)
- Jumps sideways both directions-Walks up and down steps independently with alternating foot pattern

Fine Motor Skills

- Hits a target at least 5 feet away by bouncing a ball towards target
- Touches thumb to each finger in succession, 1 at a time
- Shows signs of hand dominance
- Uses spoon and fork

Visual-Motor Skills

- Copies a square and other simple shapes
- Connects dots on a paper
- Cuts around simple shapes
- Folds paper in half accurately
- Colors between parallel lines

Atypical Behaviors by the End of 5 Years of Age

- Difficulty with asymmetric body movements (standing on one leg, throwing with one hand)
- Ambiguous hand preference
- Acts extremely aggressive or extremely timid
- Seems aloof around adults or other children
- Unable to concentrate on any one activity for more than 5 minutes; easily distracted
- Has trouble eating, sleeping, or toileting independently
- Experiences a dramatic loss of skills that they once had
- Avoids playing outside including on playground equipment
- Avoids barriers such as steps, curbs, etc.

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