

Pathways.org Recognizing Early Motor Delays

A Comparison Examination of Six-Month-Old Infants

Typical

Atypical

Supine

- Able to symmetrically lift and sustain upper and lower extremities against gravity
- Demonstrates increased antigravity control of the muscles of the trunk and increased freedom of extremity movement
- Exhibits quick visual-motor response of looking, reaching, grasping and transferring objects



- Shows improved ability to hold head and trunk in midline, but still without adequate antigravity movement
- Has excessively abducted and externally rotated upper and lower extremities, with movement primarily on the surface
- Appears visually interested in objects but unable to reach and grasp



Sidelying

- Rolls independently and easily from supine through sidelying into prone in either direction
- Shows active head righting and upper extremity pushing against the surface to raise body while reaching with the other hand



- Requires assistance from examiner in rolling from supine to sidelying
- Unbalanced neck, shoulder and back extension prevents use of the arm to assist in the rolling maneuver



Prone

- Bears weight on extended arms and forearms, with extension into the lumbar spine and lower extremities
- Shows emerging upper extremity control in weight shifting for reaching, grasping and playing
- Grasps toy towards thumb side of palm



- Does not choose prone position for play due to decreased head, shoulder and trunk control
- Has decreased upper extremity power, preventing weight shift towards the pelvis necessary for freedom in the upper extremities
- Positions elbows behind shoulders, preventing head and trunk lifting



Pull to Sit

- Responds quickly and assists in the maneuver by actively flexing neck and lifting head
- Also uses activity in the upper extremities and abdominals to assist
- Shows good symmetry in the head, neck and upper extremities



- Assists minimally in the pull to sit maneuver
- Demonstrates complete head lag until the upright position
- Does not assist with upper extremity pulling



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Sitting

- Shows stable head and trunk control with active extension through the thoracic spine
- Reaches with one arm at a time, using a wide base of support in the lower extremities



- Struggles to maintain head upright and in midline; cannot activate vision or explore because so much effort is required to remain upright
- Must be supported high up in the chest for stability
- Exhibits decreased trunk extension and freedom to reach



Horizontal Suspension

- Demonstrates full, sustained extension in the neck and upper thoracic spine, down through the hips and legs



- Lifts head in midline and extends through the upper thoracic spine only briefly
- Does not exhibit extension through the spine and hips



Protective Extension

- Easily and quickly brings arms forward in a full protective response when tipped toward the surface
- Props immediately on one upper extremity when reaching for a toy



- Does not bring upper extremities forward to the surface in a protective response
- Displays inadequate antigravity neck and trunk strength to free the arms to come forward



Standing

- Exhibits immediate sustained weight bearing on extended lower extremities; turns head freely to look around
- Keeps hips slightly flexed and somewhat behind the shoulders
- Uses upper extremities to assist in stabilizing the trunk



- Fails to initiate or sustain active weight bearing when placed in supported standing
- Lacks necessary antigravity head and trunk control
- Unable to align head, trunk, hips, knees and feet in the vertical

