

Motor Development of Babies/ Infants? at stages of 0 to 12 Month Old

Motor development starts from head down towards legs and from body (trunk) towards limbs. Gross motor skills enable babies to explore around and to develop spatial awareness. They need to build up core stability in trunk to provide the foundation for movements. Developmental milestones provide reference about what the expected achievements are, but each baby develops differently.

What is Gross Motor Delay?



Babies with gross motor delay fail to perform activities respective to their age.

There can be many reasons for the delay, including genetic factors, complications during pregnancy, prematurity and environmental factors. Under-stimulation is also a possible reason.

Gross Motor Milestone





Babies with Gross Motor Delay at the age of 4 to 6 months old ?

What Exercises and Activities can help?

Recommendations:

✓ Follow moving objects with eyes:

lying on back; get their attention to look at an object, then move it from left to right and vice versa slowly; also up and down to encourage head turning; remember to appraise them

✓ Assisted rolling game:

lying on back; hold their bottom and legs, turn the body to either side,

with their heads to follow the move; then try the

opposite side

✓ Holding baby upright:

hold baby upright to encourage head control. Caretaker can lean a bit back, giving room to allow baby lifting head off caretaker's chest.

✓ Lying on the side:

encourage baby to play toy with hands. Caretaker can use hand or cushion to support baby.







Tummy time:

 \checkmark

spend a short time to play on tummy, baby may push with arms, a roll-up towel can be placed under shoulder to give support

✓ Use hanging toys to encourage arm reaching and lifting

Babies not yet Rolling at the age of 6-8 months old ? What Exercises and Activities can help? <u>Recommendations:</u>

✓ 'This little piggy' :

lying on back, play with baby's toes, tickle them and encourage baby to grab and hold own feet

✓ Tummy time:

spend time to play on tummy 3 times a day to strengthen the head and the back

Rolling in the side lying position:
prompt baby to roll from side lying to back first, then
roll from the back to side lying









✓ Rolling along when lying:

rolling baby from back to tummy and then onto the back; repeat several times so that the baby enjoy the movements

✓ 'Row-a-boat':

baby rest on the lap of caretaker's bent legs (see picture), hold hands together, gently pull up and back. Guide baby to sit up slowly when baby lean back



Babies not yet Sitting at the age of 8-10 months old ? What Exercises and Activities can help?

Recommendations:

✓ Supported sitting:

try to avoid baby to lean on you when sitting on your lap; encourage baby to sit upright by reaching for toy

✓ Supported sitting:

play 'horse riding' with baby sitting on your lap; tilt baby gently to front, back and the side, encouraging baby to sit upright ✓ Propped sitting on mattress:

place flat toy in front to encourage baby to put arms on it as support

✓ Supported sitting:

place toy by the side to encourage reaching, let baby put their arms on the floor for support



Some babies never crawl, go straight to standing and then walking to explore the surroundings. If the baby can achieve other physical developmental milestones, there is no reason to concern. However, crawling helps to develop coordination of limbs and stability of pelvic and shoulders



Recommendations:

- Provide supervision to let baby explore in a safe space. Use toys to get baby's attention
- ✓ "Combat crawling" :

pulling along with forearms while lying on stomach. This may lead to crawling afterwards

✓ 4 point kneeling:

lying on tummy, baby lift the chest off mat by straightening the elbows; bent baby's knees and rest on mat as support. Baby may rock in this position.

Kneel up higher from 4 point kneeling:
let baby kneel up higher from 4-point kneeling to put their hands on thicker cushion/ pillows.

Babies not yet Standing at the age of 12 months old? What Exercises and Activities can help?









<u>Recommendations:</u> :

Supported standing:

- Baby to stand holding against caretaker who can wear something interesting, e.g. stickers, necklace to catch baby's attention
- ✓ Standing holding on furniture:

Using toys to get attention for 1-2 minutes, baby may find it easier to hold the rail on cot rather than on sofa

- Encourage baby to bounce while standing with hands on furniture: \checkmark using music as background and gently move baby's bottom sideways.
- \checkmark From 4 point kneeling with the help from caretaker or furniture, assist baby to get up to high kneeling, then stand up
- Encourage baby to pick up object/ toy placed on floor nearby when baby stand with hands on furniture









 Encourage baby to cruise to reach for the toy placed at the far end while holding onto furniture





Precautions and Safety issues for Exercises:

- Use appropriate mattress and sturdy furniture
- Beware of baby's general condition and give short rest; use interesting and different toys to keep baby's attention
- Don't let baby sleep on the stomach or on the side while sleeping, unless your baby can change positions on their own.
- For any query, you may consult your physiotherapist



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