

Family Education Sheet

Supporting motor skill development: babies with CCHD 0-6 months old



Boston Children's Hospital

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This sheet explains ways you can support your baby's muscle development and motor skills with simple activities and daily practice.

Key points

- These activities are important to do now to set your baby up for developmental success during their first year.
- These activities are safe.
- We recommend that all infants with HLHS get Early Intervention (EI) during this time.

What is fine motor development?

- Fine motor skills include using hands to eat, draw, play, or pick up small items.
- Reaching, grasping and play
 - Have your child try to fixate on and follow moving objects with their head and eyes.
 - Show your baby moving objects and faces to follow.
 - As newborns, infants can hold objects in their hands.
 - Place toys in your baby's hands so they can practice holding onto them. At first, just do it with one hand. Over time they can hold toys in both hands.
 - Put a graspable object, like a plastic ring or rattle, in your baby's hand and tug on it very gently. This activity helps build muscle as your baby tries not to let go.
 - Provide soft objects directly into the palm of your baby's hand for them to feel with their hands. Watch for individual finger movements.
 - Around 3 months old, babies begin to bat at toys within reach.
 - Hang toys above your baby that make sound or light up when you hit them.
 - Help your baby use either of their arms to hit the toys.

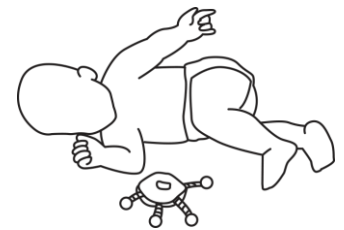


- Around age 5-6 months, infants become more coordinated and start to reach and grasp with two hands together and bring objects to their mouth to explore.
 - Continue to provide toys that hang over your baby for them to reach and grasp.
 - Provide toys that are interesting to feel in the mouth, like teething rings.
- By age 6 months, they transfer a toy from one hand to the other while on their back.
 - Offer larger toys that require two hands to hold.
 - Give toys that are easy to hold and pass from 1 hand to another, like a ball with holes in it or a plastic ring or rattle.



What is gross motor development?

- Gross motor skills involve the large groups of muscles used to sit, stand, walk, run, keep balance, or change positions.
- Space for movement
 - Provide a safe space without boundaries, like on the floor, where your baby can play on their sides, back, and tummy.
 - Try to avoid using devices that restrict your baby's movement. Devices like swings, bouncer seats, Bumbo chairs, and exersaucers limit your baby's movement or introduce them to positions that they might not yet have the muscle strength for. Only use this kind of equipment for less than 20 minutes at a time and try not to use them a lot.



Kicking

- Newborns practice kicking their legs and holding them off the floor when they're on their back.
 - Provide time where your baby's legs are free to kick and move.
 - Encourage them to move their legs by touching their legs gently or bicycling their legs.



Tummy time

- Tummy time is one of the most important things you can do with your baby to help them reach their early developmental milestones. Tummy time helps strengthen the neck, back, shoulder, and arm muscles. It supports independence and helps your baby learn skills to get moving, like rolling and crawling. It's also great for their visual, sensory, and oral development.



- If your baby recently had surgery, please see the sternal precautions guidelines given to you or talk to your child's therapist or physician about when it's safe to begin tummy time. Most infants can do tummy time within two weeks of open-heart surgery.
- Even newborns can practice tummy time. As a newborn, your baby will lift their head for just a few seconds and should be able to lift and turn their head to either side to rest it back down.

- When you start doing tummy time, slowly roll them from their back to their belly.
- When on their belly, help them get into a crawl position with arms and legs under their body.
- Practicing tummy time over a Boppy or a soft blanket roll early on can make it easier or more comfortable for baby to lift their head up.



- You can hold your baby chest-to-chest to practice tummy time when held, eventually reclining yourself into a lying position to make it more challenging for your baby.



- You can also practice tummy time on your lap, over your leg, or over your arm.
- Get on the floor with your baby to entertain them during tummy time.
- Offer your baby a high-contrast or light-up toy to look at during tummy time.
- Try practicing tummy time for several minutes, several times during the day to increase the amount of time in this position.
 - Around age 3 months, your baby should be able to hold their head up a little higher and for several seconds at a time.
 - Over the next few months, your baby should practice pushing more through their arms. First, they will push up on their elbows. As

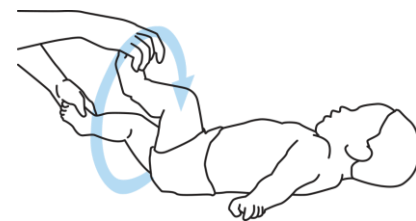
they get stronger, they should be able to push up on their hands and straighten their elbows.

- Use a mirror, your face or toys to help encourage lifting up higher and staying in this position.
- Once they can push up through their arms, your baby will learn to start reaching out for toys or turning around on their tummy to reach toys around them.
 - Provide fun toys near your baby to encourage them to move and reach.
- Practice tummy time when your baby is awake and calm.
- Tummy time should be a supervised activity.
- Babies should always be on a firm surface on their backs to sleep until they can roll over by themselves.



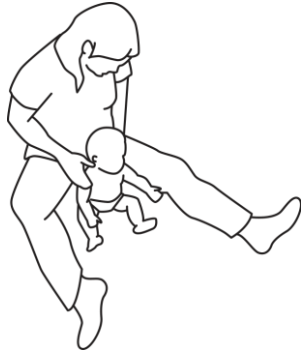
Rolling

- Babies start rolling to their sides around age 2 months.
 - You can help them get started learning this skill by encouraging them to reach for their knees or feet when playing on their back.
 - You can play with their feet, holding them up where they can see them to bring awareness to them.
 - Slowly roll them from left to right.
 - Allow them to play on each side for a few minutes.
- Babies usually learn to roll from back to belly between age 4-6 months.
 - Help them roll onto and off of their tummy every time you practice tummy time during the day.
 - Encourage your baby to practice rolling to the left and the right sides. Babies should be able to roll equally in both directions.



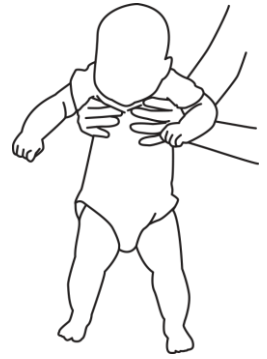
Sitting

- You can practice holding your baby in a supported sitting position while they are developing head control in the first few months.
 - Hold your baby in sitting either in their bed, on the floor or on your lap.
 - Provide support to their head and trunk as needed.
 - As they gain more neck strength and are able to hold their head up for short periods, you might see their head bobbing. This is a sign that their muscles are working and learning how to hold their head upright on their own.
- By age 4 months, your baby should develop good strength and control to hold their own head up without help when you hold them or while sitting.
- Around age 4-5 months, start to help your baby with "prop sitting." This means that they are using their arms out in front to hold themselves up.
- Give them as much support as they need at first and lower the amount of support as they get stronger.
- Try using a small stool or box to prop their arms on.
- As your baby gets stronger back and tummy muscles, they will start to sit up without needing their hands.
- Babies usually learn to sit up by themselves between age 6-7 months. They may still fall over when playing or reaching for something.
- As their sitting balance improves, they will become more playful and interactive with toys in a seated position.



Standing

- Around age 4-7 months, gently place your baby to a standing position. By this time, they will start to understand the function of each body part, and will start to use their feet and legs to bounce up and down with your help. This will help prepare them for walking.



When should I seek help?

- If you ever have a concern about your baby's development or growth, always bring it up to your child's pediatrician and physical/occupational therapist.
- Contact your provider if you notice a flat spot on your baby's head or if your baby has a hard time turning their head to one side.
- Contact your provider if you notice your baby mostly uses only their right or left arm/hand during play.
 - They should use both sides equally.
 - Children don't become right or left handed until they're 2-4 years old.
- Contact your provider if your baby is more than 4 months old and is having a hard time holding their head up on their own when they are sitting up or help upright in your arms.