

# Hearts & Minds: Neurodevelopment in Patients with Heart Failure & VADs

## Toddler & Preschool Age (2–5 years old)



**Children with Heart Failure/VADs are resilient, and each has unique strengths. Some may be at higher risk for certain difficulties. Look for:**

- Early developmental delays in language, motor, cognitive, and feeding skills
- Pre-academic difficulties, such as with learning colors, letters, and/or numbers
- Higher risk for autism spectrum disorder if they were born with congenital heart disease
- Anxiety, especially medical anxiety (e.g., shots, office visits) and separation anxiety

### Resources

- Each state has its own early intervention program to provide physical, occupational, and speech/language therapies for children ages 0–3. See the CDC’s list for each state at: [cdc.gov/ncbddd/actearly/parents/state-text.html](https://www.cdc.gov/ncbddd/actearly/parents/state-text.html).
- At age three, child may qualify for an Individualized Education Program (IEP) through a public preschool that could include:
  - *Physical Therapy*
  - *Occupational Therapy*
  - *Speech/Language Therapy*
  - *Pre-Academic Intervention*
- Outpatient therapies (ask your care team for a referral):
  - *Behavioral/Psychological (e.g., for anxiety, big tantrums, or autism spectrum disorder symptoms)*
  - *Feeding (e.g., learning to eat without tube, increasing nutritional intake)*



### Helpful Tools & Tips for Home

- Point out colors, shapes, letters, and numbers at home and in the community
- Use visual schedules to help your child learn routines
- Involve your child in being a “helper” at home
- Start to play simple games that involve following rules and turn-taking
- Teach visual cues to help your child slow down, listen, and think before acting in the moment (e.g., gesture to slow down, point to your ear, and then your head)
- Help your child develop emotional regulation skills by identifying/labeling your child’s emotions and modeling acceptance of all feelings, positive or negative
- Support consistency in healthy sleep routines and habits
- Consider setting time limitations for use of mobile device/technology



Having a child with medical issues can be stressful. See resources for caregivers at: [div54cwsiq.wixsite.com/caregiverwellbeing/resources](https://div54cwsiq.wixsite.com/caregiverwellbeing/resources)