



## Car Seat Testing and Safety

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When discharge is anticipated, the infant's nurse will notify the family of the need to bring in the car seat to be used for transportation upon discharge from the hospital. Car seat evaluation usually is done for infants born at less than 37 weeks. Ideally, the car seat would be brought to the neonatal intensive care unit (NICU) approximately 48 hours before anticipated discharge. Parents of preterm infants should be advised to choose an "infant only" car seat. The nurse should encourage the parents to bring the base of the car seat in to the hospital when car seat testing will occur.

Parents should be encouraged to refer to their car's owner manual and car seat's instructions for information about how to install the car seat prior to performing the car seat evaluation (once again, it would be ideal to not have to learn how to put the car seat together on the day of their infant's discharge). The parents should confirm that the car seat is not subject to manufacturer recall and that it meets Federal Motor Vehicle Safety Standards (FMVSS).

The car seat should not be used as an infant carrier. An infant car seat is a rear facing seat only and has a convenient removable carrier that connects to a base installed in the car. This car seat provides the best fit for newborns and smaller babies and can be used from 4 lbs to 40 lbs, depending on the model. A convertible seat is a larger and heavier seat and can grow with your child. The recommendations for use are birth to 50 inches tall. For premature babies, this car seat might be too large to start with. You can use it rear facing until your child is at the 2-year recommendation, then forward facing until the weight limit, and then you can convert to a booster seat. This type of car seat stays in the car.

The parents can verify a car seat's compliance with FMVSS at [www.safercar.gov/parents/CarSeats/Car-Seat-Safety.htm?view=full](http://www.safercar.gov/parents/CarSeats/Car-Seat-Safety.htm?view=full). Some local law enforcement agencies can provide a car seat inspection. Parents should be encouraged to reach out to their local law enforcement

agency for an inspection prior to the infant being discharged.

During the car seat testing, the infant is positioned in the car seat in the riding position and monitored with a cardiorespiratory monitor and pulse oximeter for 90–120 minutes or for the duration of travel to home if longer than 90 minutes. The nurse documents any episodes of apnea, bradycardia, and desaturations as well as any stimulation or intervention that is needed.

To pass the car seat evaluation, the infant should have no instances of apnea, bradycardia, or oxygen desaturation during the observation period. For a failed evaluation, the nurse should then notify the appropriate medical team member for a full evaluation of results. A car bed may be indicated for infants who experience apnea, bradycardia, or oxygen desaturation during the observation period. If a car bed is considered, another evaluation time period should occur.

Recently, car seat testing and evaluation has been in question as it remains unclear whether performing infant car seat challenges actually helps to identify at-risk infants or whether it causes false concern and unnecessary testing and interventions. This is due to prolonged time in a semi-upright position, which can lead to lower oxygen saturation levels in both the preterm and term infant.

What nurses can do for NICU infants and their parents is to ensure that the parents know how to safely and correctly position their infant in the car seat. This may require further education for the nursing staff. The nurse should recommend that another adult sits in the back seat next to the infant for observation when traveling. The parents also should be advised that the car seat is to be used only for transportation purposes and not as an infant seat in the home.



The American Academy of Pediatrics advises parents to keep their infants and toddlers in rear-facing car seats in the back seat of the vehicle until age 2 or until the child reaches the maximum height and weight for their seat. A rear-facing child seat does a better job supporting the head, neck, and spine of infants and toddlers in a crash because it distributes the force of the collision over the entire body.

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## Car Seat Testing and Safety: Information for Parents

If your baby was born before 37 weeks, he or she may participate in a car seat test, also known as a “car seat challenge,” before being discharged from the hospital. This test will last about 1–2 hours, during which your baby’s heart rate and breathing will be monitored. This test will determine if your infant can tolerate being in a car seat for a car ride.

Your baby should ride rear facing and in the back seat of your car until he or she is 2 years old or exceeds the maximum weight and height requirements for the car seat, as this is the safest position. Make sure you have read all car safety seat instructions as well as your car’s instruction manual to learn how to install your car seat properly *before* the day of discharge. Many fire departments, police stations, and hospitals have fitting stations with certified child passenger safety staff available to help parents and families determine if their car seat is installed correctly.

Never use a baby carrier in the car instead of a car seat. An infant car seat is a rear-facing seat only and has a convenient removable carrier that connects to a base installed in the car. This car seat provides the best fit for newborns and smaller babies and can be used from 4 pounds to 40 pounds, depending on the model. A convertible seat is a larger and heavier seat and can grow with your child. The recommendations for use are birth to 50 inches tall. For premature babies, this car seat might be too large to start with. You can use it rear facing until your child is at the 2-year recommendation, then forward facing until the weight limit, and then you can convert to a booster seat. This type of car seat stays in the car.

Make sure the straps in the car seat are properly positioned, secured, and fit snugly against your baby’s chest. You should only be able to fit two fingers in between your baby and the straps. Loose straps do not provide maximum safety. Every car seat has an expiration date; check to see when your car seat will expire. If you cannot

find the expiration date on the car seat, contact the manufacturer.

When you are driving with your baby, try to bring another adult with you who can sit in the back seat to watch your baby. When you are traveling without another adult, remember to take your baby out of the car. Remember, you are never to leave your baby alone in a car.

More tips for keeping your baby safe on the car ride:

- Use car seats and seat belts on every single trip you take, even if it’s just down the street.
- Never use a car seat that has been in a car crash. To find out more, visit [www.nhtsa.gov](http://www.nhtsa.gov).
- Do not use a second-hand car seat, such as one from a garage sale or one from a friend or family member





because you do not know if it has been damaged in a crash or recalled.

- Never use padding or other products that did not come with your car seat.
- Never use a car seat that has been recalled. Make sure that when you purchase your baby's car seat that you fill out and return the registration form. This will ensure that you are informed of any recalls for the seat you purchased.
- For current, up-to-date information, visit [www.safekids.org/ultimate-car-seat-guide](http://www.safekids.org/ultimate-car-seat-guide).



# Cardiopulmonary Resuscitation (CPR) Training

Healthcare professionals caring for high-risk infants and their families are responsible for preparing parents and families for safe discharge and transition to home. Discharge education for these patients should cover safety at home, including cardiopulmonary resuscitation (CPR) training. This education can decrease parents' and families' worry about discharge to home. Families must be evaluated to determine what form of education is appropriate to meet their needs. Learning disabilities or language barriers among family members must be recognized and taken into consideration. Education should be tailored to these family members. There are several potential educational styles for infant CPR, including in-person, written, and video instruction.

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## Cardiopulmonary Resuscitation (CPR) Training: Information for Parents

The American Academy of Pediatrics suggests all parents learn infant cardiopulmonary resuscitation (CPR) before their babies leave the hospital. For some families, CPR training is required before their baby can be discharged. CPR training for infants and children may be offered through the Red Cross, American Heart Association, local libraries, a local hospital, or local emergency services. You will learn basic CPR skills to help your baby until emergency responders arrive. If an emergency happens, CPR can save your baby's life by reestablishing blood flow to the heart, brain, and other organs and restoring breathing.

CPR may be necessary in many different emergencies, including suffocation, accidents, near drowning, and suspected sudden infant death syndrome. CPR works best when started as soon as possible, but you must first decide if it's needed. CPR should only be done if your baby is not breathing, has no heartbeat, or is not responding.

Although you may feel very anxious as your baby is being prepared for discharge from the hospital, becoming familiar with emergency procedures will help decrease your fear and increase your confidence when taking your baby home. Partner with the neonatal intensive care unit team early in your baby's hospitalization to help prepare you for your baby's safe transition to home. If your family is having trouble understanding the steps in infant CPR, stop your instructor and ask questions.

After learning infant CPR, review the steps often. It is common for parents to be concerned that they will not remember the steps to CPR in an emergency. When calling 911, explain the issue you are having. They will try to walk you through it by phone until the team arrives. Remember, CPR training is provided so you can give life-saving care and increase your child's chance for survival in case of emergency until emergency responders can take over.