Car Seat Testing and Safety

When discharge is anticipated, the infant's nurse notifies the family of the need to bring the car safety seat to be used for transportation upon discharge from the hospital. Car seat evaluation is usually done with infants born less than 37 weeks of age. Ideally the car seat is brought to the hospital approximately 48 hours prior to anticipated discharge. Parents of preterm infants should be educated to choose an “infant only” seat. The infant's nurse encourages the parents to bring the car safety seat preassembled. Remind parents to bring the base as well as the car seat for the evaluation. Parents are encouraged to refer to their car owner’s manual and car safety seat instructions for information about how to secure the seat in the car prior to performing the car seat evaluation. The parents and NICU staff should confirm that the car seat is not subject to manufacturer recall and verify that it meets Federal Motor Vehicle Safety Standard (FMVSS) 213 and is not simply an infant carrier. Nurses or parents can verify a car seat's compliance with FMVSS 213 at www.safercar.gov.

The infant is positioned in the car safety seat in the riding position and monitored for 90 minutes or for the duration of travel, if longer than 90 minutes, with a cardiorespiratory monitor and pulse oximeter. Studies are usually performed within an hour after a feeding. The nurse documents any episodes of apnea, bradycardia, and desaturations as well as any stimulation or intervention required. Typically, to pass the car seat evaluation, the infant should have no instances of apnea, bradycardia, or oxygen desaturation during the observation period. Any episode of apnea, bradycardia, or oxygen desaturation during the observation period usually indicates a failed car seat evaluation. The nurse should notify the appropriate medical team member for a full evaluation of results.

The American Academy of Pediatrics advises parents to keep their toddlers in rear-facing car seats until age 2 years or until the child reaches the maximum height and weight for their seat. A rear-facing child safety 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. They also advise that most children will need to ride in a belt-positioning booster seat until they have reached 4-ft 9-in. tall and are between 8 and 12 years of age. Some hospitals will recommend parents have a car seat inspection prior to infants being discharged home. Local law enforcement officials usually can do this and some hospitals also provide this service. Make sure parents get this information early so they can get this done as soon as the car seat is purchased.

Bibliography


Car Seat Testing and Safety: Information for Parents

If your baby was born before 37 weeks, they may undergo a car seat challenge test before being discharged from the hospital. This test will last about 1–2 hours (the time will be about equal to the duration of the car ride home), and during the test your baby’s heart rate and breathing will be monitored. This test will determine if your child can tolerate being in a car seat for a car ride.

A child who is younger than 1 year of age and weighs less than 20 pounds must be in a rear-facing car seat. Your child’s car seat should never be placed in the front seat of a vehicle. Place your baby’s car seat in the center of the back seat facing the rear, because this is the safest position. Make sure to read any instructions that come with your baby’s car seat as well as your vehicle’s instruction manual to learn how to install your car seat properly. Many fire departments, law enforcement agencies, and hospitals may have fitting stations with certified child passenger safety technicians to help parents and families determine if their car seat is installed properly.

When you reach your destination, remember to take your baby out of the seat and out of the car. Every year, between 30 and 50 infants die after being left in their car seats when their parents got distracted. Many people find it helpful to store items they will need (e.g., brief case, purse) on the floor by the baby so they must go into the back seat before leaving the car. Never use a baby carrier instead of a car safety seat. 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. Contact the manufacturer of your specific seat to find out what the expiration date is if you do not know this information.

Resources and Tips for Keeping Kids Safe in Cars

• Use car seats and seat belts on every single trip you take, even if it’s just down the street.

• Model good behavior. If you buckle up, your child will be more likely to do so.

• Make sure your kids understand that unless everyone is buckled up, the car doesn’t move. No exceptions.

• Never use a car seat that has been in a serious crash. A seat that has been in a minor crash might be okay to use. To find out more, visit www.nhtsa.gov.

• Safety advocates do not recommend buying a used car seat from a garage sale, flea market, or thrift store. These seats may be expired, have missing parts, be damaged, or have been recalled. There is no way of knowing if these seats have been in a crash or if they had received damage that can’t be seen with the naked eye. Used car seats can still be used, but if you were not the original owner of the seat or do not

1. Car seat reclined according to manufacturer’s instructions
2. Retainer clip at armpit level
3. Harness comes through the seat at or below the child’s shoulders
4. Harness snug and flat

Courtesy of Susan Ise, BSN RN, and Alyssa Kendrick, BSN RN
know the history of everyone who used the seat, you should not use it.

- Never use padding or other products that did not come with your car seat.
- Never use a car seat that has been recalled. For information on recalls, contact the manufacturer or the Vehicle Safety Hotline toll free at 888.327.4236. Be sure to fill out the registration form when you purchase your car seat. This will ensure that you are informed of any recalls of that seat.

Find out about the child passenger safety laws in your state online at www.safekids.org.