



Car Safety for Infants Born Prematurely or with Low Birth Weight

Infants born prematurely or with low birth weight may have additional needs that may affect travel. This brochure answers some questions you may have about safely transporting your child.

What car seat is best for my child born prematurely?

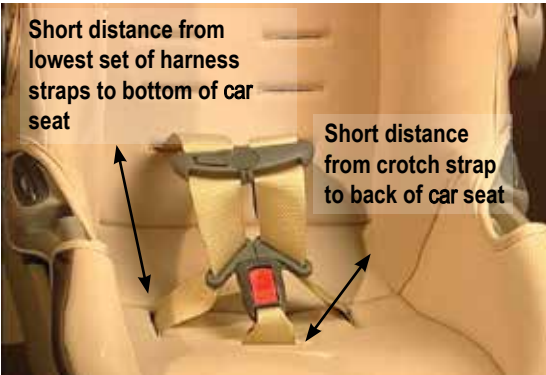


Figure 1

A car seat that meets federal safety standards and fits your infant is best. Your infant must fit in the weight and height requirements of the car seat. Choosing a car seat that has a smaller harness and multiple harness slots may fit your infant better. The distance from the lowest set of harness slots to the bottom of the child seat should be short enough so that the harness is at or below the infant's shoulders (*Figure 1*). The distance from the crotch strap to the back of the seat should be short enough so that the infant's bottom is held back against the car seat and does not slide forward (*Figure 1*).



Figure 2

The harness should be positioned at or below your infant's shoulders and the chest clip positioned at armpit level. You know the harness is tight enough if your fingers and thumb slide off the harness when you pinch the webbing at your child's shoulder (*Figure 2*).

My child's head and body lean to the side when in the car seat. What can I do to make the fit better?



Figure 3

Most car seats available today come with built-in head supports or infant inserts for smaller infants. These infant inserts have been crash-tested for use with that specific car seat (*Figure 3*).

Infant Insert



Figure 4

If your infant needs more head support or trunk support, you can use a rolled blanket or towel along each side of your infant's body (*Figure 4*) - if allowed by the manufacturer. **You must have an additional caregiver monitor your infant at all times if using the candy cane-type rolls near your infant's head and/or face to ensure breathing is not interrupted.**

You can also place a rolled washcloth or diaper between the crotch strap and your infant's diaper to help keep her bottom against the back of the seat and prevent slouching forward (if allowed by the manufacturer).



Figure 5

Never use an infant insert, head support insert, or any padding that does not come with your specific car seat. There are no federal safety standards for these products (*Figure 5*). It could change the way the car seat reacts in a crash situation.

I was told that my child needs to be observed in a car seat before we can leave the hospital. What does this mean?



Figure 6

Some infants born prematurely experience breathing problems when seated in a car seat. The American Academy of Pediatrics recommends that infants born prematurely or with some other medical conditions complete a Car Seat Tolerance Screening. This allows your infant to be observed for breathing-related problems before they are discharged from the hospital nursery (*Figure 6*).

Ask your infant's physician or nurse if your infant needs to be observed in the car seat before hospital discharge. The Car Seat Tolerance Screening may also be referred to as the "Angle Tolerance Test", "Car Seat Challenge", or "Car Seat Test" at some hospitals.

How should my child travel if there are breathing-related problems?

If your infant has problems with breathing, heart rate, and/or oxygen levels when seated in a car seat - traveling flat in a car bed that meets federal safety standards may be the next option. A car bed allows your infant to lie down when traveling. Check with your infant's physician or nurse about which car bed is best for your infant and where you can get one. Many hospitals have car bed loan programs.

If your infant needs a Car Seat Tolerance Screening in the conventional car seat...your infant should complete the Car Seat Tolerance Screening in the car bed prior to discharge to ensure safety.



Figure 7



Figure 8



Figure 9

Car Bed	Weight	Height	Phone	Websites
Angel Ride (Figure 7)	Less than 9 pounds	Up to 21.5 inches	317-409-0148	eztether.com
Dream Ride (Figure 8)	5-20 pounds	26 inches or less	800-544-1108	na.doreljuvenile.com
Hope (Figure 9)	4.5-35 pounds	Up to 29 inches	317-409-0148	eztether.com

If my child has to travel in a car bed, when will she be able to use a rear-facing car seat?

If your infant is using a car bed, your physician should schedule a Car Seat Tolerance Screening in a rear-facing car seat to measure heart rate, breathing, and oxygen levels when appropriate prior to using the rear-facing car seat. This screening might be done at home (oxypneumocardiogram), at the hospital (a polysomnogram), or at an outpatient clinic by direct monitoring of the heart rate, breathing, and oxygen levels when in the rear-facing car seat.

Where should I put medical equipment in the car?

Place medical equipment such as apnea monitors and oxygen tanks on the floor of the vehicle wedged with pillows, foam, or blankets (*Figure 10*) if allowed by the vehicle manufacturer - as they may interfere with advanced airbag sensors. Equipment can also be placed in unoccupied vehicle seats with the lap-and-shoulder belts restraining the equipment. There are currently no straps, belts, or bags commercially available that are specifically made for securing medical equipment in a vehicle.



Figure 10

Other considerations when traveling with your child born prematurely or your child with low birth weight:

- Minimize travel
- Travel with an additional caregiver in the back seat to observe your infant
- Never place your car seat in front of an airbag
- Only use your car seat for travel
- Never leave your infant unattended in a car seat in or out of the vehicle

Are there any car seats for infants who weigh less than 5 pounds?

Yes. Conventional car seat manufacturers do have options. Some rear-facing only infant car seats have a minimum weight of 3 pounds or 4 pounds. It is best that your infant's weight is within the range required by the manufacturer of the car seat.

How can I be sure my infant is buckled up correctly?

Always read and follow the directions that come with your car seat and your vehicle owner's manual. You can find a certified child passenger safety technician (CPST) who is trained in adaptive transportation (Safe Travel for All Children course) at cert.safekids.org. Click on "Find a Tech". In the CPST search form, choose your state, and make sure to click "Special Needs" in the Extra Training field.

If there is not a CPST trained in adaptive transportation in your area, please call 800-543-6227 for further assistance.

For more information contact:
National Center for the Safe Transportation of Children
with Special Health Care Needs
Indiana University School of Medicine
800-543-6227
preventinjury.medicine.iu.edu

Inclusion of products in this brochure does not imply endorsement.

Figure 7 source: www.eztether.com

Figure 8 source: www.djgusa.com

Figure 9 source: www.eztether.com



SCHOOL OF MEDICINE

INDIANA UNIVERSITY

© 2024 Do not reproduce without permission

This brochure was developed by the National Center for the Safe Transportation of Children with Special Health Care Needs and funded by the National Highway Traffic Safety Administration and the National Safety Council.

The views contained in this document are those of the authors and not necessarily those of the National Highway Traffic Safety Administration.

Revised 02/29/2024