

## Car Seats and Car Beds —

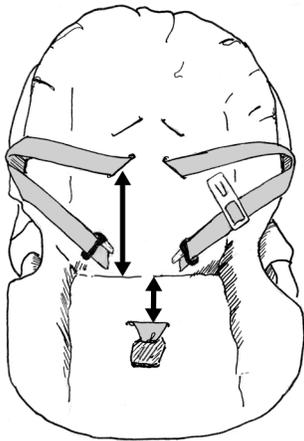
### Transporting Premies and Small Newborns Safely

Not every car seat intended for newborns is appropriate for very small babies and those with special needs due to prematurity or other medical conditions. Selection must consider both proper harness fit and the manufacturer's lowest weight limit rating.

The American Academy of Pediatrics has published a Clinical Report regarding transporting premature and low-birth-weight infants. It provides guidelines for pediatricians and other healthcare providers, including recommendations for how and when to perform "angle tolerance testing" on certain newborns before hospital discharge. In some cases, following these medical guidelines leads a doctor to recommend that the infant use a special kind of restraint, a car bed (described later in this document). The clinical report can be found at <http://pediatrics.aappublications.org/content/123/5/1424>.

### Shopping for a conventional car seat for a small newborn

The guidelines that follow will help you find a car seat that is safe for a small baby. It should be noted that most of this shopping information is applicable for all babies. However, the extra-small dimensions and, in some cases, health considerations of premature and low-birth-weight infants makes it especially important to shop carefully to meet their specific needs.



#### Shopping tips:

- Use a tape measure or other measuring tool when shopping. Smaller harness measurements are better for a small baby.
- When measuring harness height, push down on the seat padding as a child's weight would.
- Also consider crotch buckle distance from the seat back and whether it is adjustable. Ideally, the strap sits right in front of the diaper area, preventing baby from sliding forward.
- Many car seats for small infants include a padded insert that is helpful for positioning the baby. However, do not use add-on products of this type that did not come with the car seat.

#### In general, look for:

- **A Car Seat With a Low Shoulder Harness Position** (8 inches or lower)

Whenever a child is riding rear facing, the harness straps should be positioned so they are **at or below** the infant's shoulders. Caregivers must follow a car seat's instructions to ensure that the harness is adjusted properly this way. For small babies, this fit may not be attainable when using some car seats because the lowest possible position is higher than their shoulders. It is unsafe for a baby to ride in a car seat with this fit because, in a crash, her body will not be properly secured by the harness.

Instead, there is space for her body to move upward from the force of a crash, which can put her head in a less-protected position. Such movement also increases the likelihood that a child will be thrown from the car seat during the crash. On the other hand, a properly fitting harness on a rear-facing child cups the shoulders slightly; this holds the child in place from the very moment of a crash, limiting movement and keeping the body within the protective car seat shell.

Therefore, caregivers who are looking for a car seat that has the best likelihood for proper harness fit for a small newborn should consider ones that have a lowest harness position option that is no more than 8 inches above the seat cushion. However, always consider the particular infant. Although 8 inches from the seat cushion is a guideline for the maximum that may be appropriate for many small infants, some very small infants need a harness with a lowest shoulder position for the harness that is even lower than 8 inches. Some car seats with 5-6 inches in this dimension are available.

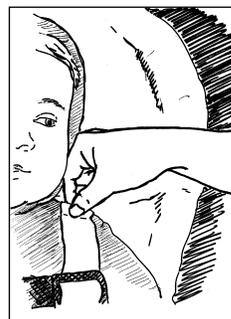
Don't assume all car seats are the same! Though many rear-facing-only (RF-only) car seats (the type with a handle) have low lowest harness positions, not all do. Also, convertible-style car seats may look very large overall, but certain models do have internal harness measurements that would fit a small newborn as well as many RF-only car seats.

For a resource that provides measurements for various car seat dimensions, including lowest harness height, go to: <https://carseatblog.com/34474/carseat-comparison-tool-measurements-and-features-database>.

*(Disclaimer: SRN is not affiliated with this site and does not guarantee the measurements it lists. Also, due to various features such as inserts and padding, measurements can be somewhat subjective and may vary.)*

- **A Harness That Can Shorten Enough to Fit Snugly on a Small Infant**

For a harness to work properly in a crash it must fit the occupant snugly. The harness should fit close to the body, without sagging, along all body segments—at the shoulders, along the torso, and across the legs. This fit is as important on small infants as any other child. However, when using some car seat models, it is impossible to shorten the webbing enough to fit an infant who is very small.



To check if the harness is snug enough, be sure that you cannot comfortably slide more than one of your fingers under the harness as it crosses any of the areas along the body. If you can stack a second finger under the harness outward of the infant's body, the harness is too loose. Another way to test is to attempt to pinch the webbing (see image, above); you should not be able to pinch webbing in an up/down direction along any part of the webbing as it crosses the body. If the harness cannot be made snug enough, the infant should not use that car seat.

Some car seats for infants come with specially designed newborn inserts that may put a very small infant in a better seating position and/or improve the harness fit. Check the car seat's owner's manual regarding guidance for when this insert must/may be used and when it must/may be removed.

*IMPORTANT: Infant inserts that are not sold with the car seat are nonregulated and should not be used.*

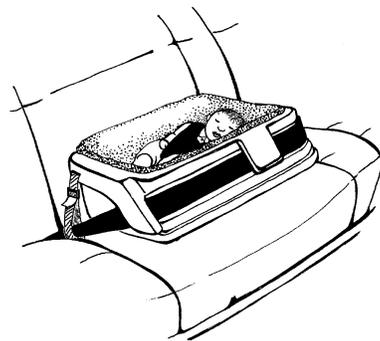
Many car seats have a harness that can be set up to become shorter for a newborn, and then reset later to accommodate a larger baby. This is different than routine shortening and lengthening for daily use, and usually entails rethreading shoulder or hip areas of the harness through what the instructions might call "infant loops." Similarly, the crotch strap can sometimes be shortened or moved inward for a small infant. It is always important to check the instructions to see if these types of adjustment should be made.

### ● **A Car Seat That Can be Used at the Baby's Weight**

Car seats are required to indicate a lower and upper child weight limit, so check to make sure your baby weighs within the allowed range. For some car seats that can be used rear facing, the child weight minimum is 5 pounds, while other models allow use beginning at 4 pounds, and a few others say they may be used "from birth." Years ago, it was difficult to find a car seat with a starting weight of less than 5 pounds. However, nowadays there are ample options on the market for babies under 5 pounds, including most RF-only car seats and even some convertible models. Because so many options exist, it is no longer necessary to keep lists of available models, as once was the case. A visit to any car seat retailer is likely to yield a number of options for a shopper who is careful to read labels. A helpful online resource is the American Academy of Pediatrics' annually updated Car Seat Product Listing: <http://www.healthychildren.org/English/safety-prevention/on-the-go/Pages/Car-Safety-Seats-Product-Listing.aspx>.

## **Children Who Can't Safely Ride Semi-Reclined**

Infants who are premature, very small, or have other medical conditions may experience dangerous breathing or heart rate problems when seated in the semi-reclined position of a rear-facing car seat. For these infants, even a car seat with a harness that fits perfectly according to the guidelines above is not appropriate.



The hospital should monitor at-risk infants in a car seat before discharge. In some cases, a doctor will determine that the child may go home only if riding in a lying down position.

In these situations, a car bed must be used. Car bed options are limited to those listed here. (For ordering information, see the Car Beds—Direct Sales and Distributors list, below.)

**Car beds:** For Infants Who Must Ride Lying Down

<b>Brand</b>	<b>Car Bed Model</b>	<b>Weight Range</b>	<b>Notes</b>
Angel Guard	Angel Ride	Birth to 9 pounds	Fits on one vehicle seat. Baby may ride in prone, supine, or side-lying position.
Cosco (Dorel)	Dream Ride SE and Dream Ride SE Latch	5 to 20 pounds	Installment requires two positions of vehicle bench seating. Baby may ride in prone or supine position.
Merritt Manufacturing	Hope Car Bed	4.5 to 35 pounds	Installment requires two positions of vehicle bench seating. Baby may ride in prone, supine, or side-lying position.

**Direct Sales and Distributors of Car Beds:**

Angel Guard: Angel Ride Car Bed. <http://www.angel-guard.com> (to purchase directly; next-day delivery available)

Cardinal Health: Angel Ride Car Bed. 800-234-8701 (ask for Material # BC2403FOF); [www.cardinal.com](http://www.cardinal.com)

Dorel: Cosco Dream Ride SE and Dream Ride SE LATCH Car Beds. 800-544-1108

Child Source (Mercury Distributing):(Angel Guard and Cosco Dream Ride SE and Dream Ride SE Latch. Find contact info for this distributor below.

Merritt Manufacturing: (Hope Car Bed) Fax: 317-893-2567; Phone: 317-409-0148; E-Mail: [info@eztether.com](mailto:info@eztether.com)

Prevention Alternatives: Angel Guard, Cosco Dream Ride SE and Dream Ride SE Latch, Hope Car Bed. Find contact info for this distributor below.

## **Institutional Distributors:**

The following are some of the distributors that offer discount pricing on child restraints. Healthcare systems often use these companies to stock their low-cost car seat distribution programs and/or inventory of special needs devices for loan.

**Evenflo** — Institutional sales of \$500 or more only; use Child Source, below, for smaller purchases.

Patsy Pilcher, (800) 768-6077, *ppilcher@bellsouth.net*

**Graco**—Gail Southwell, Graco sales rep., 1-330-21-4772

**Child Source (Mercury Distributing)**—<http://www.mercurydistributing.com>  
330-723-4739 or (800) 815-6330

Car seats for infants: Chicco, Combi, Dorel (Cosco, Safety 1st), Evenflo, Nania

Car beds: Angel Guard and Cosco Dream Ride SE

**Prevention Alternatives, Inc.**— 517-927-7731; *shinn@comcast.net*

Car seats for infants: Chicco, Combi, Cosco, Evenflo, Graco, Nania, Recaro, Safety 1<sup>st</sup>

Car Beds: Angel Guard, Cosco Dream Ride SE and Dream Ride SE Latch, Hope Car Bed