

# Car Beds for High Risk Infants and Preemies

The American Academy of Pediatrics (AAP) recommends that at-risk infants undergo a period of observation in a car seat or car bed before hospital discharge, known as the Car Seat Tolerance Screen, previously referred to as the Car Seat Evaluation/Challenge or Angle Tolerance Test in order to monitor for possible apnea, bradycardia or arterial oxygen desaturation.

Infants at-risk for apnea, bradycardia and desaturation are:

- Infants born <37 weeks gestational age.
- Infants with Birth Weight <2500 grams (5lbs 5oz).
- Infants with medical conditions that place them at risk, including but not limited to those with hypotonia, airway anomalies or cyanotic congenital heart disease/surgery.

High risk infants who meet any of the above criteria will undergo a period of observation in their rear-facing car seat usually 30-60 minutes after feeding. The **recommended observation is 90-120 minutes or the estimated time of travel, whichever is longer.**

The infant is considered to have passed the Car Seat Tolerance Screen if there are no episodes of apnea, bradycardia or oxygen desaturation for the duration of the car seat evaluation. If an infant who has been properly positioned and monitored in the rear-facing car seat for the recommended period of observation does **not** pass the car seat tolerance screen, the infant will then be considered for re-evaluation. The evaluation may include further medical intervention, repositioning and retesting, or retested in a car bed if the child is otherwise healthy and approved for discharge.

Currently, there are three car beds available. They are the AngelRide, Dreamride and Hope car beds. The PA Traffic Injury Prevention Project staff is available for trainings regarding child passenger safety and the proper selection and use of car seats and car beds for discharge of all newborns and children.



## Car Bed Installation Basics

Always read and follow the manufacturer's instructions when installing a car bed. If you are unsure, seek the advice of a nationally certified child passenger safety technician.

Basic installation tips for all car beds:

- Make sure the car bed is installed with the **baby's head facing toward the center of the vehicle**. The baby's head should NOT be next to a vehicle door.
- Install the car bed using either LATCH lower anchor connectors or the seat belt.
  - Follow the car seat instructions for correcting routing of the lower anchor connectors/seat belt.
  - Follow the vehicle manual to locate the lower anchors or learn how to lock the seat belt. Secure the car bed tightly against the vehicle seat. The car bed is tightly installed when it does not move more than one-inch from side-to-side or front-to-back when pulled at the belt path.
- Secure the infant snugly in the harness system (per manufacturer's specific directions).

### Want to learn more?

The Pennsylvania Traffic Injury Prevention Project is able to come to your facility and offer a one hour training on the best practice in child passenger safety.



Key objectives of the training include:

- Explanation of the Pennsylvania Child Passenger Protection law.
- Discussion on the "best practice" recommendations for child passenger safety for children, including newborns.
- Sharing of key educational messages regarding proper car seat and seat belt use that can be shared with clients.

Medical staff will receive a CME/CEU from the University of Pittsburgh for their participation in the one-hour training.

To schedule your training, contact the Pennsylvania Traffic Injury Prevention Project (PA TIPP) at 1-800-CAR-BELT or contact your regional coordinator directly. Visit the PA TIPP website at [www.pakidstravelsafe.org](http://www.pakidstravelsafe.org) for more information, resources and services.

# Car Beds and General Use Guidelines

## AngelRide: Manufactured by Angel Guard

The AngelRide Infant Car Bed installs side-facing and is designed for positioning infants, particularly those weighing less than 5 pounds with special health care needs. The car bed can be used up to 9 pounds and 21.5 inches. The AngelRide Car Bed:

- Allows infants to be positioned on their stomach, back or side.
- Provides a five-degree surface that raises the infant's head to facilitate breathing.
- Secures the infant with a 3-point internal harness that wraps around the shell of the car bed and has a quick release buckle.
- Provides a deep, fully padded shell with ventilation.

The seat belt routes around the shell of the car bed for vehicle installation. The AngelRide expires in 4 years from date of manufacture and has a Do Not Use date stamped on the bottom of the shell.



## Dreamride Car Bed: Manufactured by Dorel Juvenile Group



The Dreamride installs side-facing and is designed for transporting children with special health care needs and other medically fragile conditions who weigh between 5 to 20 pounds and are 19 to 26 inches in height. The Dreamride Car Bed:

- Allows infants to be positioned lying down on their back.
- Secures the infant with a 3-point harness that is adjusted from the back of the shell.
- Has a carry handle that must be in the upright and locked position when installed in the vehicle.

The car bed is equipped with the LATCH lower anchor connectors and one set of loops to enable seat belt installation when lower anchors are not available in the vehicle. The expiration date is 8 years from date of manufacture.

## Hope Car Bed: Manufactured by Merritt Manufacturing, Inc.

The Hope Car Bed is designed for children with special health care needs who require a larger car bed. The weight range for the child is 4.5 to 35 pounds and up to 29 inches in height (longer if the child is able to bend their knees). Due to the size of the child and the weight of the car bed there are side handles for easy transport outside the vehicle. The Hope Car Bed comes with a small restraint bag, a small cummerbund, a three point harness and a large cummerbund to cover the full range of weights up to the maximum 35 pounds. The Hope Car Bed:

- Offers 5 different restraint options:
  - Two sizes of restraint bags with cummerbund for supine, prone, or side facing positions.
  - 3-point harness with cummerbund for supine or prone position,
- Available accessories include: side-facing restraint bag and leveling wedge

The car bed vehicle installation requires the use of two seat belts. There are also leveling straps to assist with a snug installation. The Hope Car Bed has a shell life of 10 years and all parts are replaceable.



## New Lie Flat Feature on Kiddy Evolution Pro 2 & Pro 2 XL Car Seat

### Evolution Pro 2

- 4—22 pounds & 30"
- Adjusts to the individual size of the baby through:
  - newborn inlay,
  - crotch cushion, and
  - 5-point harness system
- Lie-flat function
  - **inside and outside** the car

### Evolution Pro 2 XL

- 4—35 pounds & 37"
- Adjusts to the individual size of the baby through:
  - newborn inlay,
  - crotch cushion, and
  - 5-point harness system
- Lie-flat function
  - **outside** the car

### Unique lie-flat function:

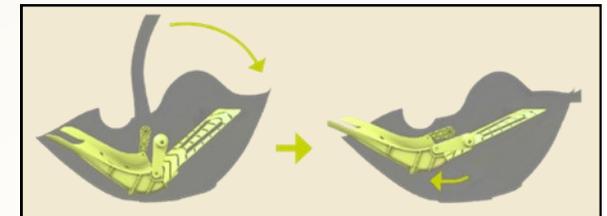
The Evolution Pro 2 is a rear-facing only car seat with a lie-flat function inside and outside the car. The tested and patented technology by Kiddy was specially developed for the needs of newborns and premature infants.



By turning the handle, the slatted frame within the infant car seat is moved into a flat lying position. The slatted frame also absorbs the energy in the event of a crash or uneven roads and protects the sensitive spine of the baby. The Evolution Pro 2 offers the lie-flat function in the car as well\*.

Since their neck muscles are not fully developed, the head can easily tip to the front while sleeping, which can lead to breathing problems and potentially to lower oxygen saturation. This can be prevented by a flatter lying angle.

Used as a Travel System, both the Evolution Pro 2 and the Evolution Pro 2 XL can be adjusted to the lie-flat position.



\*Please note that the Evolution Pro 2 requires at least 31.1" of space when in the reclined position. Please check the front passenger ledger before installing the Evolution Pro 2 in the lie-flat position.

For more info, visit: <http://www.kiddyusa.com/carseats.html>