Resources for Health Care Providers

The Virginia Department of Health provides the following free resources for health care providers to assist in meeting the American Academy of Pediatrics guidelines, Safe Transportation of Newborns at Hospital Discharge.

Child Passenger Safety Training for Health Care Providers

A free two-hour child passenger safety training for health care providers (i.e., nurses, doctors, volunteers, transporters) and anyone else that assists with educating parents when infants are discharged from the hospital. Participants will learn best practices in child passenger safety through lecture and hands-on demonstration. Completion of this training will yield two nursing contact hours. To learn more or to schedule training, contact the Child Passenger Safety Outreach and Education Coordinator at 804-864-7735.

Technical Assistance for Evaluation of Hospital Child Passenger Safety Policies

Contact the Child Passenger Safety Outreach Coordinator for information at 804-864-7735.

Useful Web Sites

American Academy of Pediatrics: www.aap.org
National Highway Traffic Safety Administration: www.nhtsa.gov
VDH Child Passenger Safety Program: www.safetyseatva.org

VDH VIRGINIA DEPARTMENT OF HEALTH
Protecting You and Your Environment

www.safetyseatva.org

Child Passenger Safety Health Care Provider Listserv

Join this Listserv to gain the latest information about child passenger safety research, advancements, resources, and more as it relates to healthcare providers. To join, simply visit www.safetyseatva.org and click on "Health Care Providers."

Web Site for Health Care Providers

Visit www.safetyseatva.org to gain specific child passenger safety information related to health care providers and learn of resources that will assist you to meet the child passenger safety needs of your patients.

Free Patient Handouts

To order free child passenger safety resources for patients please visit www.safetyseatva.org.

Low Income Safety Seat Distribution and Education Program

Free child safety seats and education on proper usage are available for income eligible families from as early as the third trimester of pregnancy through seven years of age. Visit www.safetyseatva.org or call 1-800-732-8333 to locate a site.

For more information on First Ride Safe Ride, please contact:

Injury Prevention Program
Virginia Department of Health
Division of Prevention and Health Promotion
109 Governor Street, 9th Floor;
Richmond, VA 23219
804-864-7735

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firstride
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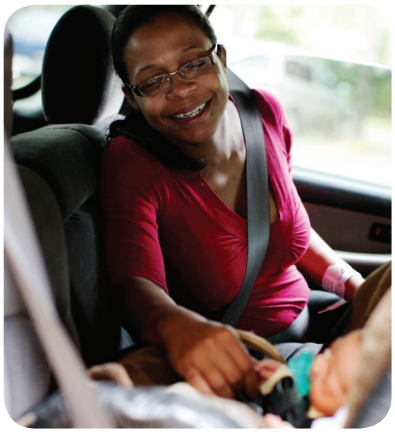


Child Passenger Safety **GUIDELINES** for Health Care Providers

In 2012, the total number of live births in Virginia was just under 103,000.[1]

Most infants will take their very first ride in a vehicle when they are just days old. The National Highway Traffic Safety Administration (NHTSA) has found that although 99% of parents use a safety seat for infants weighing less than twenty pounds, 83.9% of those infants are improperly restrained in their safety seat.[2] Using a child safety seat incorrectly places these children at risk for death or injury in a crash. Making sure that a baby's first ride is a safe ride should be the responsibility of both parents and health care providers.

Health care providers are in a very influential position to educate parents about child passenger safety. The 2008 Gallup Poll's annual survey of professions revealed that nurses were the most (83%) trusted profession with medical doctors ranking as the fourth (64%) most trusted profession among the public.[3] NHTSA research has also found that parents are more receptive to the child passenger safety messages when shared by health care providers.[4]

The Hospital's Role in Child Passenger Safety

Incorporating child passenger safety education into the hospital environment can foster safe transportation practices among families. If a hospital neglects to offer appropriate child passenger safety information and resources to families, they have missed opportunities to protect infants from motor vehicle crashes.

In 2009, the American Academy of Pediatrics (AAP) Committee on Injury and Poison Prevention reaffirmed their policy statement on Safe Transportation of Newborns at Hospital Discharge.[5] This statement recommends that hospitals adopt comprehensive policies, procedures and education programs for the discharge of newborns in child safety seats (CSSs) that include:

- Requiring the use of an appropriate child safety seat for every newborn that is discharged: including healthy newborns, premature infants, and infants with special health care needs.
- Ensuring that every parent receives child passenger safety education prior to newborn discharge.
- Regularly reviewing child passenger safety educational materials for accuracy.
- Providing periodic in-service education for all staff working with parents of newborns.

The Virginia Department of Health's First Ride, Safe Ride project aims to assist hospitals in adopting the recommendations of the American Academy of Pediatrics.

A safe journey home starts with you.

GUIDELINES for Educating Parents

GUIDELINES

Patients should be referred to the Virginia Department of Health (1-800-732-8333 or www.safetyseatva.org) for additional guidance or support.

Guide parents in appropriate selection of child safety seats

Parents often ask, "What is the best safety seat for my child?" The correct response is that the best seat is one that fits the child, fits securely in the vehicle, and has "user friendly" features so that parents will secure the child on every ride.

There are two types of child safety seats for infants:

1. Infant-only safety seat
2. Convertible safety seat in the rear-facing position

Infant-only Safety Seat

Infant-only child safety seats are designed to be used rear-facing only.

- Most infant-only safety seats come with a carrier and a detachable base as shown in Image 1. The base is installed in the vehicle and the carrier can easily be removed from the base without taking the baby out of the carrier. An extra base can usually be purchased for use in another vehicle.
- Some manufacturers allow you to use carriers without the base. Parents and caregivers should follow manufacturer guidelines.
- Infant-only safety seats have an upper weight and height limit that will vary for each safety seat model. Read the safety seat instruction manual or the safety seat label for the weight and height limit. When a low birth weight baby does not fit in an infant-only safety seat, a special needs seat will be needed.
- Once a baby reaches the weight and height limits of an infant-only safety seat or if a baby's head is within 1 inch of the top of the seat, the baby should use a convertible safety seat in the rear-facing position (Image 2). Convertible safety seats usually have higher weight and height limits in the rear-facing position than infant-only safety seats.

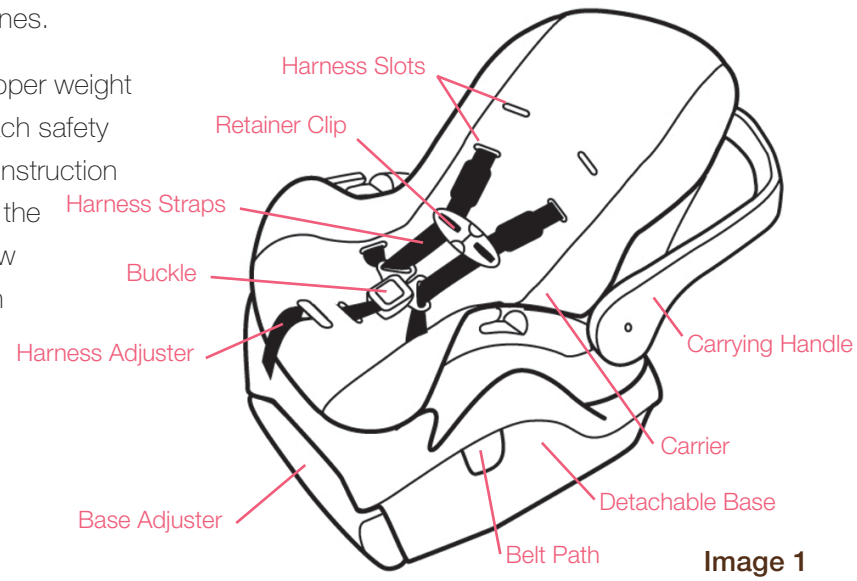


Image 1

Guide parents in appropriate selection of child safety seats (continued)

Rear-facing Convertible Safety Seat

Convertible child safety seats can be used rear-facing and then forward facing once the rear-facing weight and height limits are reached.

- Convertible safety seats will have two different sets of weight and height limits; one for rear-facing and one for forward-facing.
- Convertible safety seats usually have higher weight and height limits in the rear-facing position than infant-only safety seats. These safety seats can be used for very tall or large babies that still need to be rear-facing.

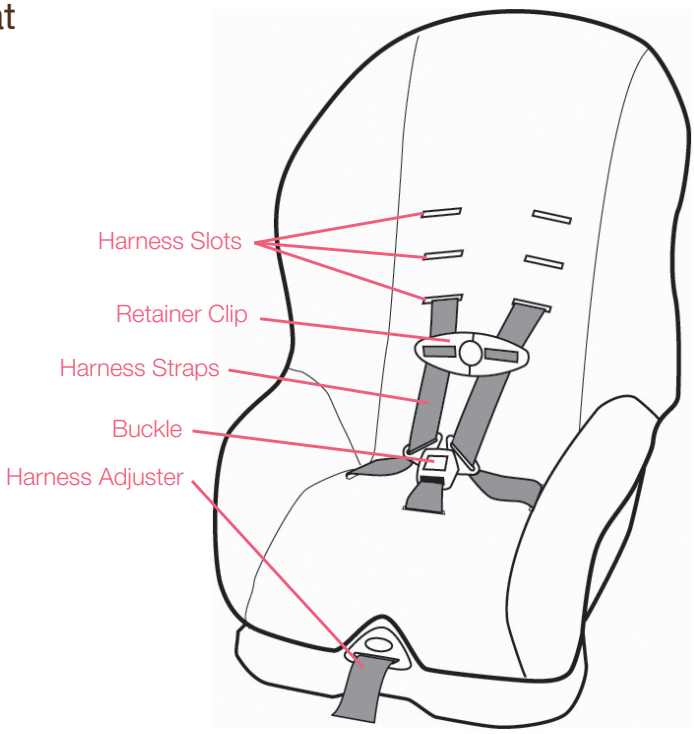


Image 2

Use of non-regulated child safety seat accessories

Non-regulated or aftermarket products such as car seat covers that go between the child and the safety seat, harness padding, extra head support, etc. are not recommended by child safety seat manufacturers or safety experts. Despite the claims of some companies, these products are NOT regulated by federal safety standards and have not been crash tested or certified. Adding these products would negate the warranty from the manufacturer and could compromise the integrity of the safety seat.

If the safety seat did not come with a head support or the baby needs additional support to prevent his/her head from flopping to the side, place a small rolled up blanket around the baby's head to fill the empty space as shown in Image 3. Do not place the blanket behind the baby's head.

If the baby is pulling his/her legs up and out of the leg straps, a small rolled cloth diaper or towel can be put between her/his legs behind the harness buckle as shown in Image 3.

Install the safety seat rear-facing in a vehicle

The safest way for an infant to ride is rear-facing. Rear-facing child seats provide the best protection in a frontal crash, because the crash forces are transferred from the back of the restraint to the infant's back, the strongest part of an infant's body. The restraint also supports the infant's head. Severe tensile forces on the neck in flexion are also prevented by use of rear-facing safety seats.[6]

Properly installed child safety seats reduce the risk of death by 71% for infants involved in crashes, according to the National Highway Traffic Safety Administration.

In 2009, the American Academy of Pediatrics released a recommendation that children ride rear-facing as long as the safety seat will allow.[7] The earliest a child should be turned around to face forward is when they are at least one year of age AND at least 20 pounds.

Children should ride in a rear-facing seat to the highest weight or height allowed for rear-facing use by the manufacturer of the seat. As an infant approaches 20 pounds, when his or her head is within an inch of the top of the seat, and at the 4-, 6-, or 9-month visit, it is appropriate to counsel families that they should transfer the infant to a convertible seat that is approved for rear-facing use to higher weight and height limits.

Help parents understand the importance of using the convertible car safety seat in the rear-facing position longer than one year by counseling that children are five times safer that way than when riding in a forward-facing seat into the second year of life.[8]

Image 3

Demonstrate the use of harness straps, chest clip, and warn about thick clothing

According to data collected in 2013 by the Virginia Department of Heath, harness strap misuse is the most common misuse among parents and caregivers; approximately 80%. Harness misuse can include the harness straps not being properly adjusted, being too loose, not in the correct harness slots, not attached or threaded incorrectly.[9] The harness straps secure the baby in the safety seat. The most common and safest type of harness is a 5-point harness. It has two straps that secure the shoulders and two more straps that secure the hips.
It buckles between the legs [see Images 1 and 2].

Image 5

The bottom harness slots should be used for a newborn infant. Parents will need to move to the higher harness slots as the baby grows. However, while rear-facing, the harness straps should always be in the slots at or below the baby's shoulders.

Harness straps should be snug and flat on baby's shoulders, not arms. The straps are snug enough when excess harness webbing cannot be pinched between the thumb and index finger after buckling in the child as shown in Image 6. If excess webbing is present, tighten the harness. The vehicle seat belt and harness strap can stretch during a crash so it is very important to make sure the harness is always snug.

Most safety seats have a plastic harness retainer clip that should be level with the baby's armpits as shown in Image 4. This clip helps to hold the harness straps on the shoulders.

Image 4

Always buckle the baby in the seat first, then place blankets over the harness and never under the harness straps. Never overdress baby or use bulky outerwear, as this can also interfere with correct harness fit. Instead, place a blanket over the baby for additional warmth.

Safety seat installation videos are available online at www.safetyseatva.org

Image 6

Evaluate the handle placement

In a crash, infant safety seats are designed to rebound into the vehicle seat to protect the infant. However, as the seat rebounds, it can also break the carrying handle if it is in the incorrect position. This could potentially injure the infant or another passenger. Some manufacturers do allow the handle to remain upright in the carrying position on some of their models. Refer to the safety seat instruction manual to determine proper handle placement.

Warn parents that attaching toys, mirrors, and other accessories to the handle is not recommended. Adding additional items that did not come with the safety seat may interfere with its performance in a crash and may become dangerous projectiles in the event of a crash or sudden stop.

Laws in Virginia

Virginia law, Code of Virginia Article 13 - § 46.2-1095, requires all drivers to properly secure a child up to the age of eight in a child restraint device that meets federal standards. Rear-facing child restraint devices must be placed in the back seat of a vehicle. In the event the vehicle does not have a back seat, the child restraint device may be placed in the front passenger seat only if the vehicle is either not equipped with a passenger side airbag or the passenger side airbag has been deactivated.

The law applies to anyone (i.e., parents, grandparents, babysitters, friends) who provides transportation for a child in any vehicle manufactured after January 1, 1968. Public transportation (taxis, buses), regulation school buses, and farm vehicles are exempted.

The child restraint law is primary enforcement. Therefore, no other violation need be committed prior to ticketing for failure to have a child in an approved seat. The child must also be restrained properly.

A $50 civil penalty fine is imposed for failure to have a child in a child restraint device. A $20 civil penalty fine is assessed when persons who are transporting a child that is exempted from this law due to medical reasons do not carry a written statement of the exemption. All fines collected go into a special fund to purchase safety seats for low-income families.

Any person found guilty of violating this law a second or subsequent time when the violations occurred on a different date shall be subject to a civil penalty of up to $500.

As the law is subject to change, visit www.safetyseatva.org for the most current version of the law.

Incline the rear-facing safety seat at an appropriate angle

Infants must ride sitting in a semi-reclined position. This position helps keep an infant's head from falling forward and closing off their airway. This is especially important for infants under the age of 6 months because they have weak neck muscles. The rear-facing safety seat should be reclined approximately 45 degrees or at the angle directed by the instructions provided with the safety seat. Some safety seats have an angle indicator, as shown in Image 7, that will help you to know the correct angle. If the vehicle seat slopes and the safety seat is too upright, the infant's head may fall forward.

Image 7

Some safety seats have an adjustable base to get the correct angle. However, depending on the vehicle seat, this may not be enough. A foam pool noodle or roll towel can be used to get the correct angle as shown in Image 8. Refer to the safety seat owner's manual to verify the noodle and the safety seat adjustment can be used at the same time.

Infants must ride sitting in a semi-reclined position — 45 degrees or as directed by the safety seat manual.

Image 8

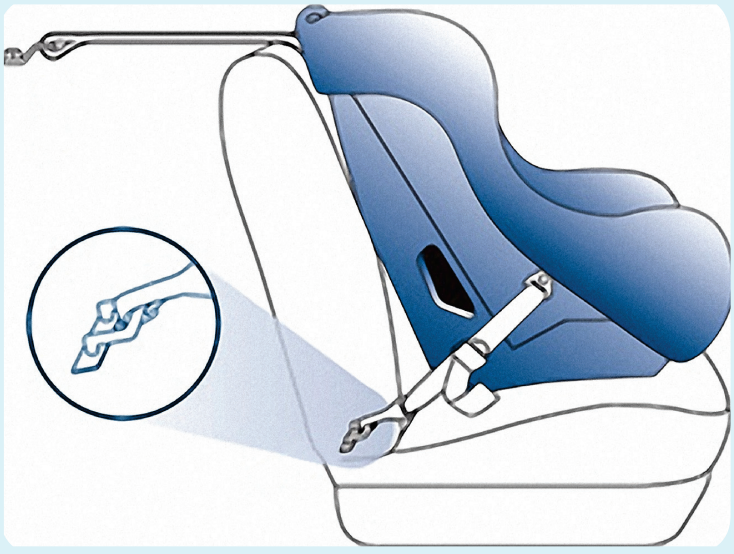
Never place a rear-facing safety seat in front of an airbag

According to Virginia Law, rear-facing child safety seats should never be used in a position equipped with an active front air bag. When rear-facing, a child's head is very close to the deployment zone of the airbag. The child restraint can be struck with enough force to cause serious or even fatal injuries to a baby when the air bag deploys.

Refer to the safety seat instruction manual and the vehicle owner's manual about using a safety seat with a side airbag.

The best location for a rear-facing safety seat is in the back seat of the vehicle where the safety seat can be installed correctly. Always refer to the vehicle owner's manual for the approved locations for use of LATCH (Lower Anchors and Tethers for Children) and seat belts.

In some vehicles without rear seating positions, the air bag must be deactivated when the front seat is used for a child passenger in the rear-facing position.



Virginia Law (Code of Virginia Article 13 - § 46.2-1095)

Rear-facing child restraint devices must be placed in the back seat of a vehicle. In the event the vehicle does not have a back seat, the child restraint device may be placed in the front passenger seat only if the vehicle is either not equipped with a passenger airbag or the passenger airbag has been deactivated.

Educate about community resources

The Virginia Department of Health's Injury Prevention Program provides the following free services to assist parents and caregivers in properly securing children in safety seats.

- Free child safety seats and education are available for income eligible families from as early as the third trimester of pregnancy through seven years of age. To learn more about the program, or schedule a training on proper usage, visit www.safetyseatva.org.
- Call Virginia's Child Passenger Safety Information Line to speak with a Certified Child Passenger Safety Technician: 1-800-732-8333.
- Safety Seat Check Stations in Virginia are staffed by Certified Child Passenger Safety Technicians that can provide parents and caregivers with hands-on education about proper safety seat use. Visit www.safetyseatva.org or call 1-800-732-8333 to locate a station or for more information.
- Safety seat installation videos are online at www.safetyseatva.org, to assist parents and caregivers with a visual demonstration of installation of safety seats from birth to seat belt use.

www.safetyseatva.org 1-800-732-8333

Special health care needs

Infants with special health care needs, such as low birth weight, developmental dysplasia of the hip, hydrocephalus, apnea, Pierre Robin Sequence, achondroplasia, feeding tubes and other conditions, will need special consideration for safe transportation. The American Academy of Pediatrics guidelines, Safe Transportation of Newborns at Hospital Discharge, recommends that hospital policies should include designation of an individual or team specifically trained to assess the needs of infants with special health care needs with regard to the selection of the most appropriate child safety seat.[5]

Safety Seat Selection

Discharge of preterm and low birth weight infants are the most common special needs situations that health care providers address on a regular basis.[10] The American Academy of Pediatrics' report entitled Safe Transportation of Preterm and Low Birth Weight Infants at Hospital Discharge provides guidelines for pediatricians and other caregivers who counsel parents of preterm and low birth weight infants about car safety seats.[10]

The size of the infant, especially for those born preterm, is an important consideration when selecting a child safety seat or car bed. Weight, length, neurologic maturation, and associated medical conditions (especially bronchopulmonary dysplasia) all influence the potential risk of oxygen desaturation, apnea, and/or bradycardia, especially when placed in a semi-reclined position in child safety seats.

A rear-facing safety seat [Image 1] is the preferred choice of travel for all infants who can maintain cardiorespiratory stability in the semi-reclined position. A car bed that meets FMVSS213 may be needed for infants who manifest apnea, bradycardia, or low oxygen saturation when positioned semi-reclined in a child safety seat.

A car bed is designed to accommodate an infant in a fully reclined position and is oriented in the vehicle seat perpendicular to the direction of travel. An infant is secured in the car bed with an internal harness, and the car bed is secured to the vehicle with the vehicle's seat belt. Car beds, like child safety seats, have specific weight requirements designated by the manufacturer and should be used according to manufacturer recommendations.

Safety Seat Challenge

It is suggested that preterm infants should have a period of observation of 120 minutes (or longer, if time for travel home will exceed this amount) in a safety seat before hospital discharge.[11]

Hospital staff who are trained in positioning infants properly in the safety seat and in detecting apnea, bradycardia, and oxygen desaturation should conduct the safety seat observation. [11]

Hospital policies should include child safety seat evaluations before hospital discharge for each infant born at <37 weeks' gestation and for those infants at risk of obstructive apnea, bradycardia, or oxygen desaturation. These policies should address the following protocols:[12]

- Define the population to be monitored
- Identify appropriate staff and their roles
- Determine parameters for monitoring
- Determine when monitoring will occur
- Develop documentation for procedures and forms

- Develop follow-up guidelines
- Make provisions for alternative restraints
- Provide appropriate training and information to all parties involved
- Determine associated costs

Tips for Parents

Health care providers should describe what the particular positional needs of the infant are and explain why these are necessary to the parents. Other useful information to provide parents transporting children with special needs include the following:[12]

- Minimize travel and advise that safety seats should only be used for travel and not for sleeping
- Make frequent stops
- Position the child in the back seat of the vehicle with an adult observing
- Deactivate the passenger-side airbag if positioning a child in the front passenger's seat is the only option
- If using portable equipment, have enough power for at least twice the length of the trip
- Secure medical equipment by wedging it on the floor or under the vehicle seat to minimize the risk of it becoming a dangerous projectile in the event of a crash or sudden stop
- Travel with a medical care plan that addresses appropriate measures to follow in the event of a medical emergency
- For long trips, have a list of health care providers and durable medical equipment providers that can be contacted en-route

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