

# Child Passenger Safety Guide for Booster Seats and Seat Belts



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# Introduction

If you are considering moving your child into a **belt-positioning booster seat** (booster, booster seat) or you are wondering if they can use the adult seat belt without a child restraint, you probably already have a lot of experience with Child Passenger Safety. You know that car seats and seat belts help prevent injuries or reduce their severity by keeping occupants in the vehicle and reducing the crash forces to the body.



Booster seats might seem less complicated than harnessed car seats. However, data from a national child restraint check system (2018-2024) showed that over half of the more than 12,000 boosters seen at seat checks had at least one misuse.

Going to a certified Child Passenger Safety Technician (CPST) at a car seat inspection (fitting) station or a seat check event is a free, convenient way to make sure your child is riding at the right **stage** (page 4) for their age and size and that the fit of the seat belt (in or out of a booster) is correct.

You might be thinking about dropping by your local fire house or police department for a car seat check. Although many CPSTs are first responders, most police agencies, fire stations, etc. do not have a CPST on staff. Be sure you are meeting with a CPST by using one of these resources:

- ▶ Vermont Health Department **[Be Seat Smart\\*](#)** program
- ▶ New York’s Governor’s Traffic Safety Committee **[Child Passenger Safety\\*](#)** program
- ▶ Safe Kids Worldwide **[National Child Passenger Safety Certification Training\\*](#)** program (only use a few fields such as state and county for best results)
- ▶ Some car seat manufacturers offer virtual checks—this would be found on their websites
- ▶ The National Safety Council also offers **[virtual appointments\\*](#)**

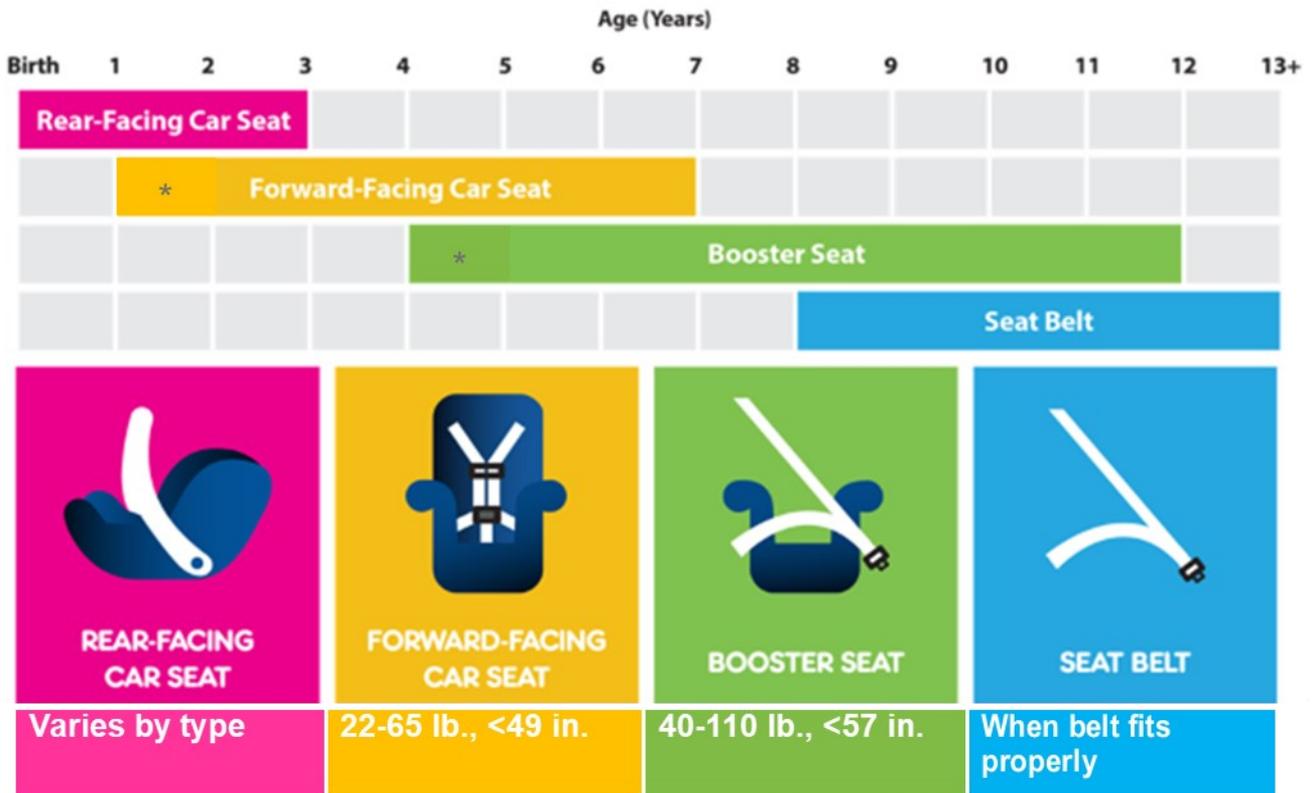
\* **Note:** See page 20 for URLs

**Disclaimer:** Unless otherwise identified, photographs are from the National Highway Traffic Safety Administration photo galleries or National Child Passenger Safety Board, Child Passenger Safety Technician Certification Training, National Safety Council. Images are intended to serve as educational examples and are not an endorsement or promotion of a specific product, service, individual, or organization.

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Ranges are approximate. Some child restraints have different minimums or maximums.

\* See [Moving to a Booster](#) (page 6) and [Child Passenger Safety Laws](#) (page 12) for minimums and best practices.

## Stages of Child Passenger Safety

There are four stages of Child Passenger Safety. This guidebook focuses on Booster Seats, and Seat Belts for child passengers. It offers evidence-based recommendations from the American Academy of Pediatrics (AAP), the National Highway Traffic Safety Administration (NHTSA), and Child Passenger Safety Technicians for parents and other caregivers.

Even though your child might be eager to get out of a harnessed car seat or a child restraint altogether, it is helpful if you avoid thinking of these stages as milestones; something to be rushed. To quote an AAP news article, “child passenger safety is one of the few areas where the next step is not ‘positive’ and where delaying transitions is best practice.”



## Booster Seats

**Children whose weight or height is above the forward-facing limit for their car seat should use a belt-positioning booster seat until the vehicle lap and shoulder seat belt fits properly. (AAP)**

Research shows booster seats reduce the risk for serious injury **by 45%** for children aged four through eight, compared with a seat belt alone.



## Moving to a Booster



To safely use a booster seat, your child must be at least four years old, unless a law, such as [Vermont's](#) (page 12), states otherwise - and meet the size requirements for the booster. All boosters now sold have a weight minimum of 40 pounds. Height minimums vary.

Transitioning to a booster also requires a child be ready for the responsibility of wearing the seatbelt properly at all times - no slouching, or slumping (even when asleep), no leaning over to reach a toy or bother a sibling, no turning around to look at the cool fire engine or cute puppy you just passed. It's best for a child be a minimum of five years old to use a booster seat.

Try out a booster on short rides and see how the child does. While they are still “in training,” coach them about staying in a position for the seat belt to fit properly.

**Tip:** Put a sticker on the ceiling of your vehicle. Tell your child to look up at the sticker if they feel sleepy. This may help them stay awake. If they do doze off, they will be more likely to stay in position for a safe belt fit.

# Booster Seats

## Key Messages

- ▶ Keep your child in a harnessed car seat until they meet the weight and height requirements, and **are ready for the responsibility**, of a booster
- ▶ Read the manuals for your booster and vehicle
- ▶ Register your seat with the manufacturer
- ▶ Keep your child in a booster until they pass the “Five Step” test (page 16)
- ▶ Make your vehicle smoke-free.
- ▶ Avoid puffy coats - a heavy coat can affect the fit of the seat belt just as it can a harness
- ▶ Visit a CPST to make sure your child’s seat is set up correctly
- ▶ Consider your child’s transportation safety wherever they are a passenger



## The Best Booster

All child safety seats that can be legally used in the U.S. must meet rigorous federal safety standards. The best booster seat is one that:



- ▶ Fits your child
- ▶ Fits your vehicle
- ▶ You can use correctly every time

The [AAP Car Safety Seat Product Listing](#) (see page 20 for URL) compiles child safety seats by stage and includes weight and height limits and price. This can help you narrow down what might work for you and your family.

# Booster Seats

## How they work!

A booster positions the child so that the seat belt fits properly - the lap portion of the belt laying low across the child's hips and pelvis, and the shoulder portion crossing the middle of the child's shoulder and chest. This helps prevent injuries to internal organs and the lower spine, called "seat belt syndrome." Most boosters also raise the child to take advantage of other vehicle safety features (e.g., side airbags, door frame padding).

The images below show contrasts how the lap and shoulder belt fit without, then with, a booster.



# Booster Selection

Boosters fall into two general types: high-back and backless. A combination or all-in-one seat can become a high-back and sometimes a backless booster. Or a high-back or backless booster can be purchased. A few vehicles have integrated booster seats.



## High-Back Booster

This type of booster is best for a new booster rider. The back and sides of the booster provide the child with reminders to sit properly and a place to lean their heads. High-back boosters can be better at positioning the shoulder belt for smaller booster riders. You must use a high-back booster for seating positions where there are no vehicle headrests. Some high-back boosters, however, require support from a vehicle headrest. Talk to a CPST to find out which ones have this requirement if you will be using a booster in a vehicle or a seating position without headrests.

## Backless Booster

This is a good option for an experienced booster rider if vehicle seat back or head rest supports the child's head at least up to the top of their ears. A backless booster may appeal to an older child, as it looks less like a car seat. Backless boosters are also very portable – great for play dates and carpools! If you are changing a harnessed car seat or a high-back booster to backless, now is the time to find the belt adjuster strap that might have come with the seat!



## Another Option - Ride Safer Travel Vest® (RSTV)

The **RSTV** (see page 17 for URL) complies with the same federal safety standards as forward-facing harnessed seats. It is a good option for fitting three across (since buckling a booster may be difficult in a tight space), or for a child who is not “booster ready” (previous page) but who has outgrown all forward-facing car seats. You may choose this vest for a long trip, even if a child is doing well in a booster on short rides. Beware of “lookalikes,” which are **not compliant** (page 12) with federal regulations.



## Purchasing a Booster - Features to Consider

If you are purchasing a new booster seat for a child (as opposed to changing their harnessed seat to booster mode), here are some things to consider:

- ▶ Some boosters have **lower anchors** that can be attached to your vehicle's lower anchor points. The anchors prevent keep the seat from becoming a projectile when it is not occupied. A seat without lower anchors must be secured by buckling the vehicle seat belt over it when unoccupied, to prevent it from becoming a projectile in a crash.
- ▶ Do you need **portability**? Many backless boosters are light and compact. They do not take up a lot of room when stored outside the car, such as at a grandparent's house.
- ▶ How **wide or narrow** do you need? If a child needs a wider seat for comfort, or if a seat has to be narrow to fit next to other passengers (car seat manufacturers have differing rules about whether seats can touch each other), check the manufacturer's website for accurate seat dimensions. Avoid information on retail sites, which may not be accurate.

Keep in mind that, like car seats, booster seats expire and should be registered, properly cleaned, and replaced after a crash according to the manufacturer's instructions. Do not use a booster seat with an unknown history.

## Vehicle Considerations

Unfortunately, some boosters don't work well in some vehicles. Some vehicles, even those advertised as "family friendly," may have features that create problems for booster riders and possibly even other seat belt users. Examples include:

- ▶ Putting **three passengers in one row**, even if not everyone is in child restraints. It might be hard to for you or your child to buckle the seat belt if the booster is next to a car seat. Unbuckling the wrong seat belt (the one being used to install a car seat) is a risk too.
- ▶ **Inflatable Seat Belts** (a belt that has an airbag built into the belt and was used in some 2011-2020 vehicles) are not allowed by some booster manufacturers.
- ▶ Shallow or narrow vehicle seats can cause a booster to **overhang** the vehicle seat. This is not allowed by most manufacturers.
- ▶ A **fixed headrest** (not removable) can push a high-back booster seat forward, creating a gap. Some booster manufacturers do not allow this.
- ▶ The **vehicle seat shape**, such as a hump in the middle seat, plastic hinges (part of the seat back folding mechanism), or large side seat bolsters, can cause a booster not to sit well on the vehicle seat.
- ▶ A vehicle with **no head rest** is an issue because backless booster riders (and seat belt users) need head support to the top of their ears. Additionally, some high-back boosters require the top of the seat to contact the vehicle seat back or vehicle head restraint.
- ▶ **Lap-only seat belts** are not allowed for booster use.



Vehicle selection is not part of CPST training. However, if you are making a choice among a few vehicle makes, models, and years, a CPST may be able to help you identify potential limitations related to Child Passenger Safety.

# Non-Compliant Child Restraints

As with car seats, there has been a disturbing increase in the sale of non-compliant boosters and “booster-like” devices to U.S. consumers in recent years. Be alert to these indicators of non-compliance:

- ▶ No mention of the U.S. Vehicle Safety Hotline or NHTSA.gov
- ▶ No manufacturer’s address/contact information
- ▶ No manual or registration card
- ▶ Spelling/grammatical errors in product literature
- ▶ Photos showing children who appear much too young to be out of a harnessed car seat
- ▶ Brand not listed on the [AAP Car Safety Seat Product Listing](#) (see page 17 for URL) - there can be new seats in the U.S. market, so this in and of itself may not be a problem. It is just a potential “red flag,” especially if there are other warning signs that a seat is non-compliant.

## Vermont & New York Child Passenger Safety Laws

These are the highlights of the current laws. For complete information, go to the state’s Department of Motor Vehicles website. If you are transporting your child in another state or country, be sure to investigate those laws. Remember, laws are minimums. It is important to follow best practices.

### Vermont

A child under age two must ride rear-facing and not in a front seat with an active airbag. A child under age five must ride in a harnessed car seat. A child under age eight must be in a booster if they are not riding in a harnessed car seat. A child under 13 must, if practical, ride in the back seat. A child under age 18 must use a seat belt if they are not using a child restraint.

**Did you know?** Vermont law bans using lighted tobacco products, e-cigarettes, and other nicotine delivering devices in motor vehicles occupied by a child under age eight. Although New York does not have a smoking law for riding with children, smoke-free helps protect children’s health. Even tobacco smoke residue can be harmful.

### New York

A child under age two must be rear-facing. A child under age four must ride in a car seat. Children must ride in a child restraint system until their eighth birthday. A child under age 16 must wear a seat belt. New York does not prohibit a rear-facing child to ride in a front seat with an airbag, but acknowledges that it is dangerous.

# Using Booster Seats

Here's how a child should look when they are riding in a booster seat.



- ▶ Read the booster manual to determine if a specific **recline** setting is required, if **overhang** is allowed (usually not), and **how the seat belt should be routed** (usually the lap and shoulder belt go under the armrests).
- ▶ For a high-back booster, determine if **vehicle headrest** or seat back support is required or if a **gap** is allowed between the booster and the vehicle seat.

**Can you use lower anchors or LATCH (Lower Anchors and Tethers for Children)?** Yes, if allowed by the car seat manufacturer and the vehicle manufacturer. With boosters, the lower anchors have a different job. Since the seat belt restrains the child, lower anchors only restrain an empty booster. The child's weight doesn't apply and you do not need less than one inch of movement. If you are not using lower anchors or LATCH (never use the tether alone), buckle an unoccupied booster in so it does not become a projectile. Some vehicle and car seat manufacturers may refer to lower anchors as "Isofix" or "Lower Universal Anchorage System" (LUAS).

## Using Booster Seats (continued)

**Do not lock the seat belt.** Help a new booster user practice buckling so they don't pull the seat belt all the way out, which will lock it. At one time, there was a type of seat belt where the shoulder portion locked automatically. This was great for installing car seats but uncomfortable for those wearing the vehicle belt. Thankfully, these vehicles are aging off the road!

While most **non-regulated products** are marketed for harnessed car seats, there are some that are marketed for booster users. These products are not covered by any federal safety standards. They may affect your child's safety by causing the lap belt to ride too high on the stomach or making the shoulder belt too loose. Examples include seat belt covers or seat belt adjusters.

Instead, if the shoulder belt is making your child uncomfortable and the booster seat has a shoulder belt guide, adjust it to help with shoulder belt placement. If a backless booster does not have a seat belt guide, see if the seat belt height can be adjusted in the vehicle. Make sure these adjustments just recenter the belt against your child's shoulder and don't cause the belt to pull away from the shoulder - you want good contact against the collar bone. Another solution is to pull the child's shirt collar up past the shoulder belt so it is less likely to rub.

**Seat belt extenders** should not be used for any child safety seat. They are only for adults who otherwise could not buckle the seat belt around their body. In that circumstance, obtaining the extender from the vehicle manufacturer for the specific vehicle model is recommended.

Review this NHTSA information about [using a booster seat](#) (see page 20 for URL).



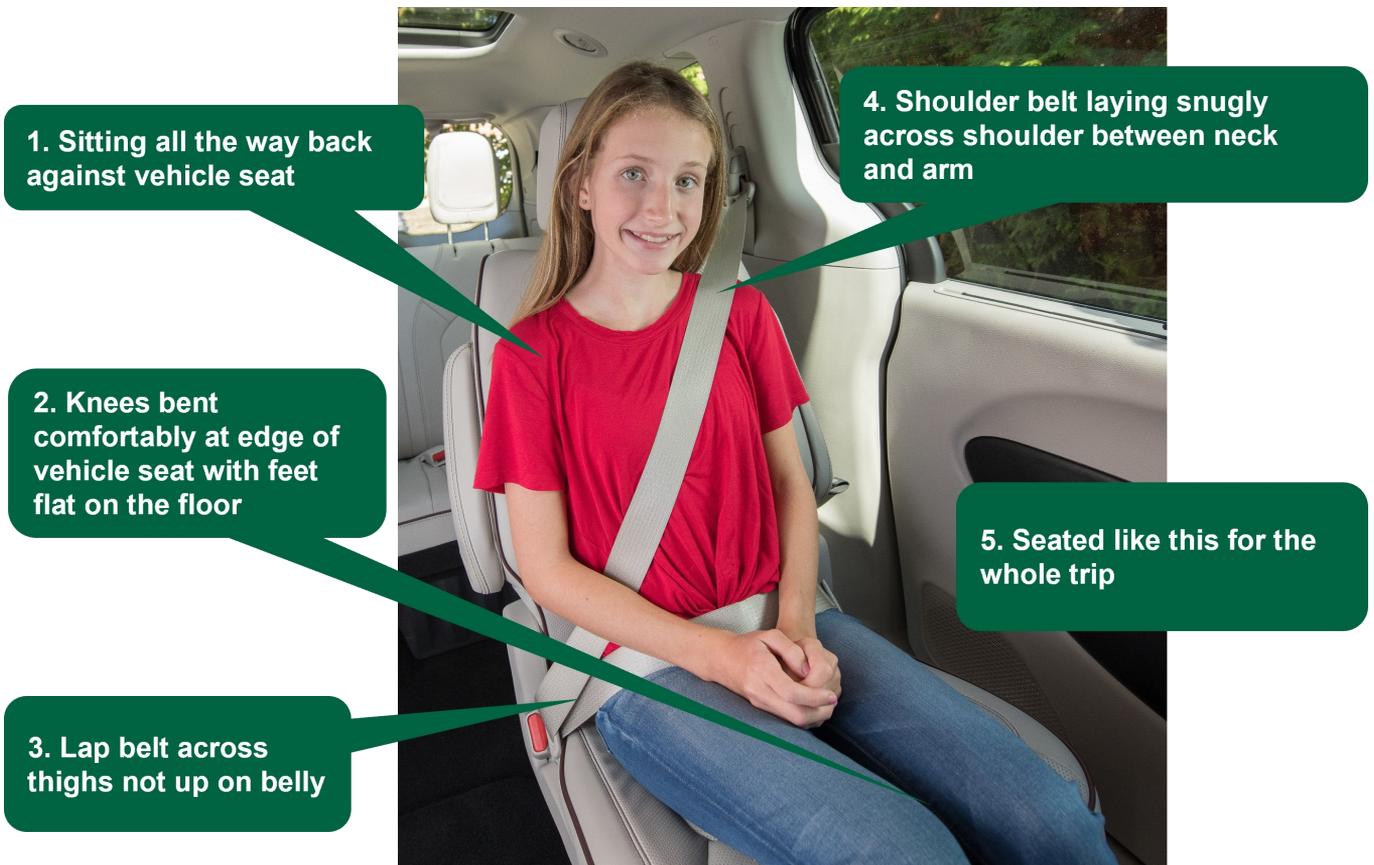
## Seat Belts

**Most children will not fit in most vehicle seat belts without a booster until **10 to 12** years of age. When children are old enough and large enough to use the vehicle seat belt alone, they should always use lap and shoulder seat belts for optimal protection. (AAP)**

Remember, the back seat is safest for children under age 13 (and is [Vermont law](#) - page 12). Also, wearing your own seat belt sets a great example for your child and future driver!

# Moving to a Seat Belt - “Five Steps”

Your child can ride safely without a booster seat when they pass these 5 steps:



- ▶ Since vehicle seat sizes and shapes vary, perform this five-step test in any vehicle or seating position where your child rides. In a 3-row vehicle, kids often 5-step in the third row but not in the captain’s chairs. In some vehicles, a child will 5-step in the center but not on a side seat.
- ▶ Do not use non-regulated (aftermarket) products on the seat belt or under your child. This is also good advice for adults.
- ▶ Avoid puffy coats (also good advice for adults).

Adults who are small in stature often ask why an older child who doesn’t pass this “five-step” test still needs a booster and an adult does not. The answer is because children’s bones are still growing. Adults have a skeleton that is fully formed. Bones such as the collarbone and hip bones are longer, so there’s a bit more leeway to get a good seat belt fit. Adults are also more likely to keep themselves and the seat belt in proper position, even if uncomfortable.

# Transportation of Children with Special Healthcare Needs

Adaptive child restraints are available for children who have outgrown all conventional car seats but need more support than a seat belt, with or without a conventional booster, can provide. Adaptive seats may have a five-point harness or include a wrap or vest that can be used to keep the child in position while they are wearing a seat belt. They may also have other accessories to help with positioning. Some of these seats, especially harnessed seats, require using a tether and may require using lower anchors. They may be larger than conventional seats, so vehicle space is a consideration. A few devices are designed to be used on school buses.

Some conditions that might require an adaptive restraint include:

- ▶ Low muscle tone
- ▶ Scoliosis
- ▶ Casts or braces
- ▶ Behaviors such as impulsiveness, distractibility, and short attention span

Adaptive seats come from durable medical equipment providers or directly from a manufacturer. The process to obtain an adaptive restraint can be complicated, lengthy, and expensive, and should involve you and your child's clinical team.

The [RideSafer® Travel Vest](#) (page 9) is not marketed as an adaptive restraint but does provide some additional support and positioning, compared with a belt-positioning booster seat. The vest allows locking the seat belt to help the child stay in position (unlike with a booster seat, where locking the belt is not recommended). The included tether strap offers upper body support and restraint.

There are also specialized vests that can be used in school buses and/or passenger vehicles, and one vest that can be used if a child needs to ride lying down due to their health condition.

Some CPSTs have received additional training in "Safe Travel for All Children." They are identified on the Safe Kids Worldwide U.S. National Child Passenger Safety Certification Training Program\* website in the Extra Training field. Some of these technicians also do virtual appointments.

Other resources include the [Indiana University School of Medicine's Adaptive Transportation\\*](#) pages and this short ["Buckle Up for Life - Special Needs" video\\*](#) from Cincinnati Children's Hospital and Toyota.

\* **Note:** See page 20 for the URLs



# Child Passenger Safety in Other Modes of Transportation

## School Buses

Did you know that the school bus is one of the safest vehicles on the road? Less than 1% of all traffic fatalities involve children on school transportation vehicles, according to NHTSA.

Large buses are designed to be highly visible and protect school children and older occupants by closely-spaced seats with energy-absorbing seat backs. This is called “compartmentalization.” Although NHTSA does not require seat belts on large buses, some states, including New York, do. If your child takes a bus that has seat belts, best practice is to use them. Small buses, while still highly visible, are more like passenger vehicles. They must be equipped with seat belts to provide protection for all occupants.

Since children are more at risk when approaching or leaving a school bus, make sure everyone knows these bus safety tips:

- ▶ Wait at least ten feet (five giant steps) from the curb or roadway edge.
- ▶ Never walk behind the bus. Walk at least ten feet in front of it while making eye contact with the bus driver and following their instructions.
- ▶ Look left, right, and left again before crossing any lanes of traffic.

## Air Travel

Boosters are not approved for aircraft use. If your child needs a booster at your destination, bring it (or a [RideSafer® Travel Vest](#) - page 9) as a carry-on item. This will ensure it arrives undamaged and with you.

## Recreational Vehicles

You might be surprised to learn that the cabins of motorized Recreational Vehicles (RVs) are exempt from federal seat belt requirements for rear occupants and are not required to be crash tested. Some seats do not face the front of the vehicle (needed for boosters). Also, an RV is full of equipment and storage materials that can become projectiles during a collision.

The best way to travel with children and an RV is to choose a non-motorized, towable camper. This way, your children can be properly restrained in the vehicle that is pulling the RV. Or, drive children in a separate vehicle.



The Car Seat Lady, a reputable organization run by a pediatrician and CPST, has an article about [traveling in an RV with children](#) (see page 20 for URL)

## Alternative Vehicles

The AAP recommends that [children younger than sixteen not ride as a passenger on an ATV](#). While other alternative vehicles may be suitable for older children, here are some key points:

- ▶ Most booster manufacturers prohibit the use of their products in alternative vehicles.
- ▶ Golf cart injuries are more common in kids than adults. Make sure only a licensed driver operates a golf cart or low-speed vehicle (LSV) and that everyone uses available restraints properly. Only transport children over age 6, and teach them how to get on and off the vehicle. LSV's have additional safety requirements for all riders and other road users.
- ▶ The American Academy of Pediatrics (AAP) recommends that no child under age 16 operate a snowmobile and that children under age 6 never ride on snowmobiles.
- ▶ Manufacturers of side-by-sides, also called often known as Recreational Off-Highway Vehicles (ROVs) or Utility Terrain Vehicles (UTVs), often suggest a minimum age of 12 for riders. The AAP states that as more research is completed, they will develop a policy statement with recommendations for side-by-sides.

Remember for some alternative vehicles, protective equipment, such as helmets, is required. Again, setting a good example is important.

# Resources

Here are Child Passenger Safety (CPS) resources included this guide, plus a few additional ones on CPS and other child safety/health topics. A URL is provided for hardcopy users.

- ▶ Vermont Department of Health Be Seat Smart - [beseatsmart.org](https://www.beseatsmart.org)
- ▶ New York Traffic Safety Committee CPS - [trafficsafety.ny.gov/child-passenger-safety](https://trafficsafety.ny.gov/child-passenger-safety)
- ▶ Safe Kids Worldwide National Child Passenger Safety Certification Training Program - [cert.safekids.org](https://cert.safekids.org) (click on Find a Tech. Only use a few fields such as state and county for best results. For a tech trained in transportation of children with special healthcare needs, choose “Safe Travel for All Children” in the special training field)
- ▶ National Safety Council virtual seat checks - [carseateducation.org/caregiver-resources](https://carseateducation.org/caregiver-resources)
- ▶ Car Safety Seat Product Listing - [downloads.aap.org/HC/carseats/ALL-combined-list-2025.pdf](https://downloads.aap.org/HC/carseats/ALL-combined-list-2025.pdf)
- ▶ Ride Safer Travel Vest - [shop.saferride4kids.com/products/ridesafer-travel-vest](https://shop.saferride4kids.com/products/ridesafer-travel-vest)
- ▶ NHTSA Ease of Use Ratings - [nhtsa.gov/campaign/right-seat](https://nhtsa.gov/campaign/right-seat)
- ▶ NHTSA using a booster seat - [www.nhtsa.gov/car-seats-and-booster-seats/how-install-booster-seat](https://www.nhtsa.gov/car-seats-and-booster-seats/how-install-booster-seat)
- ▶ Adaptive Transportation - [preventinjury.medicine.iu.edu/adaptive-transportation](https://preventinjury.medicine.iu.edu/adaptive-transportation)
- ▶ “Buckle Up for Life - Special Needs” video - [youtube.com/watch?v=-TsT5wAYldg](https://youtube.com/watch?v=-TsT5wAYldg)
- ▶ The Car Seat Lady “Traveling in an RV with Children” - [thecarseatlady.com/rvtravel/](https://thecarseatlady.com/rvtravel/)
- ▶ UVM Medical Center Car Seat Safety - [uvmhealth.org/carseats](https://uvmhealth.org/carseats)
- ▶ AAP Car Seat Safety Information for Families - [healthychildren.org](https://healthychildren.org); search “car seats”
- ▶ AAP ATV Policy Explained - [healthychildren.org](https://healthychildren.org); search “ATV”
- ▶ NHTSA Car Seats and Booster Seats - [nhtsa.gov/vehicle-safety/car-seats-and-booster-seats](https://nhtsa.gov/vehicle-safety/car-seats-and-booster-seats)
- ▶ Safe Kids Vermont website - [uvmhealth.org/safekidsvt](https://uvmhealth.org/safekidsvt) - check out the “From Toddlers to Teens” booklet!
- ▶ Safe Kids Vermont Facebook page - [facebook.com/SafeKidsVT](https://facebook.com/SafeKidsVT)

## Golisano Children's Hospital

### Injury Prevention

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Healthiest Lives.  
Together.**