

Child Safety Seat Guide

4 STEPS FOR KIDS



1 INFANT **2** TODDLER **3** BOOSTER **4** SAFETY BELT

1. Rear-facing Seats in the back seat for as long as the seat weight limit will allow; children must face rearward until at least one year old AND at least 20 pounds (preferably longer in a convertible seat for optimal protection)
2. Forward-facing Toddler Seats in the back seat from age one and 20 pounds to about age four and 40 pounds
3. Booster Seats in the back seat from about age four to at least age eight, unless 4'9"
4. Safety Belts in the back seat at age eight or older and taller than 4'9"

Brought to you by the Division of Community Health and Research in the Department of Pediatrics at Eastern Virginia Medical School. (2009)

Step 1: Infant (Rear-Facing Seats)

Infants - from birth to at least 1 year old and 20 pounds

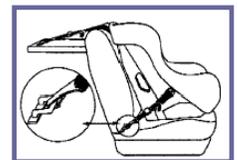
- Infants should ride in infant or convertible seats
- Children should remain rear-facing as long as possible to the maximum weight limit for the seat provided the head is below the top of the seat; they **MUST** face rearward until at least 1 year and at least 20 pounds (preferably longer in a convertible seat for optimal protection). Under no circumstances should a child face forward until he/she is at least age one and 20 pounds.
- Read labels to determine the correct seat for age, weight and height. Rear-facing weight range is generally 5-22 lbs for infant seats or 5-35 lbs for convertible seats. Check instructions and labels carefully, as weight and height specifications vary.
- Seat should be reclined at 45 degrees when rear-facing
- **READ** the instruction manual **AND** the safety belt/seat section in your vehicle manual for proper installation guidance.
- Infants should always ride in the back seat. In some states (including Virginia), it is illegal to place a rear-facing seat in the front seat of a vehicle.
- **NEVER** put a rear-facing child in front of an active airbag.
- Install infant and convertible seats tightly in the vehicle—less than an inch of movement
- If using a safety belt to install, **LOCK** the vehicle safety belt to keep it tight—refer to labels on belt, vehicle owners manual, and car seat instruction manual
- Use the tether and/or LATCH system if your vehicle and safety seat have such hardware (*see figure*). As of 2002, all vehicles are required to have the Lower Anchors and Tethers for Children (LATCH) System. Unless your vehicle and safety seat both have the anchor system, you will still need to use safety belts to secure your child's seat. Read vehicle owners manual carefully for proper positioning in the vehicle.
- Route harness straps at or below shoulders when rear-facing
- Install harness snugly—webbing should be straight without sagging or permitting a fold
- Fasten the chest clip at armpit level



Step 2: Toddler (Forward-Facing Seats)

At least Age 1 & 20 lbs. to At least Age 4 & 40 lbs

- Ride forward facing from a *minimum* of age one and 20 pounds to about age 4 and 40 pounds (*or longer*)
- Children should remain rear-facing as long as possible to the maximum *rear-facing* weight limit for the seat; they **MUST** face rearward until at least 1 year and at least 20 pounds (preferably longer in a convertible seat for optimal protection).
- Children should remain in safety seats with harness straps until at least 40 pounds or to the maximum weight limit for harness straps. Avoid graduating to a booster seat until at least 40 pounds (or later if possible).
- Toddlers have a variety of seat options: Convertible, Forward facing, Combination Toddler/Booster seats
- Read labels and seat instructions to determine the correct seat for age, weight and height. Rear-facing weight range is generally 5-35 lbs for convertible seats. Forward-facing harness weight range is sometimes 20-40 lbs; sometimes 20-65 pounds; and some harnesses go to 80+ lbs.
- Make sure child is within weight/height limits for the seat and head is more than one inch below the top of the car seat shell
- **READ** the instruction manual **AND** the safety belt/seat section in your vehicle manual for proper installation guidance.
- Children under 13 years old should always ride in the back seat. In some states (including Virginia), it is illegal to place a rear-facing seat in the front seat of a vehicle.
- **NEVER** put a rear-facing child in front of an active airbag.
- Install safety seats tightly in the vehicle—less than an inch of movement
- If using a safety belt to install, **LOCK** the vehicle safety belt to keep it tight—refer to labels on belt, vehicle owners manual, and car seat instruction manual
- Use the top tether if your vehicle and safety seat have the hardware
- Use the tether and LATCH system if your vehicle and safety seat have such hardware (*see figure*). As of 2002, all vehicles are required to have the Lower Anchors and Tethers for Children (LATCH) System. Unless your vehicle and safety seat both have the anchor system, you will still need to use safety belts to secure your child's seat. Read vehicle owners manual carefully for proper positioning in the vehicle.

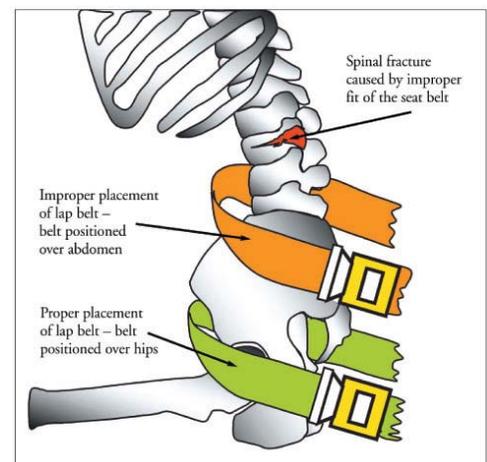


- Install seat at a 45 degree angle when rear-facing; position upright when forward-facing
- Route harness straps at or below shoulders when rear-facing; Route harnesses at or above shoulders when forward-facing
- Install harness snugly—webbing should be straight without sagging or permitting a fold
- Fasten the chest clip at armpit level

Step 3: Booster Seats

Children - from about age 4 to at least age 8

- After a child has outgrown the height and weight recommendations for a forward-facing toddler seat with harnesses (which often occurs around 40 pounds and 4 years of age—check labels/instructions), booster seats are recommended prior to transitioning to a safety belt.
- Use safety seats with harness straps to 40 pounds (or higher if the harness weight limit permits); then use booster seats until about 80 lbs., 4’9” tall, and at least age 8.
- Children ages 4-8 are at high risk for traffic injuries due to low booster seat use. Only 37% of children ages 4-8 travel in booster seats. Using a booster seat with a lap/shoulder belt instead of just a safety belt reduces injury by 59% for 4 to 7-year-olds.
- Children are not ready for regular seat belts until they are 4’9” and 80 lbs, usually at least 8 years old. Many states (including Virginia) require by law that children travel in a child seat or booster seat until at least age 8.
- Booster seats raise children higher so the safety belt fits over strong, bony parts of the body (e.g., hips and chest). Seat belts fit poorly on children’s bodies, increasing injury to soft and vulnerable parts of the body (e.g., stomach and neck). Booster seats keep 4-8 year-old children safe until they are big enough to safely use regular seat belts.
- Booster seat weight and height ranges vary greatly. Read labels to determine the correct seat for age, weight and height
 - Min. weight range is 30-40 lbs
 - Max. weight range is 60-100 lbs
 - Max. height limits vary



- Both high-back and no-back boosters are available. High-back boosters are useful in vehicles that do not have head rests or have low seat backs. Backless boosters are usually less expensive and are easier to move from vehicle to vehicle. Backless boosters can be safely used in vehicles with headrests and high seat backs.
- Many high-back boosters are actually combination seats. They come with harnesses that can be used for smaller children and can then be removed for older children
- READ the instruction manual AND the safety belt/seat section in your vehicle manual
- Children in this age group should always ride in the back seat
- Lap and shoulder belts are required with booster seats. If you have only lap belts in your car, there are some alternatives, including having shoulder belts installed in your vehicle, using a safety seat with a harness system that goes up to high weights (e.g., 80 lbs.), or using a travel vest (see a list of some available vests at www.aap.org/family/carseatguide.htm).
- If you answer “no” to any of the following questions, your child is not ready to come out of the booster seat:
 - Does the child sit all the way back in the seat?
 - Do the child’s knees bend comfortably at the edge of the seat?
 - Does the shoulder belt cross the chest at the shoulder, not the neck?
 - Does the lap belt fit low and snug on the hip bones, touching the upper thighs?
 - Can the child stay seated like this for the whole trip?



Step 4: Safety Belt

From About Age 8 & At least 80 lbs.

- Use booster seats until about 80 lbs., at least age 8, and 4’9” tall; use lap/shoulder safety belts once children outgrow booster seats
- When is a child ready for a safety belt?
 - The lap portion of the belt fits low across the hips, resting on the thighs.
 - The shoulder portion fits comfortably across the chest and shoulder, between the neck and the arm, but not on the neck.
 - The child is able to sit all the way back in the seat.
 - The child’s knees bend at the end of the seat cushion.
 - The child is able to stay like this for the whole trip.



- Make sure your child does not tuck the shoulder belt under her arm or behind her back. This leaves the upper body unprotected, putting your child at risk of severe injury in a crash.
- Lap and shoulder belts are necessary for optimal protection. If you have only lap belts in your car, there are some alternatives, including having shoulder belts installed in your vehicle or using a travel vest (see a list of some available vests at www.aap.org/family/carseatguide.htm).
- Always use the back seat for children under age 13

Children with Special Needs

- Some children may require special seats for a variety of medical conditions, including:
 - Prematurity, low birth weight
 - Orthopedic conditions, casts (including hip spica casts)
 - Cerebral palsy and other neuromuscular disorders
 - Autism and related disorders
 - Down's Syndrome
- Some hospitals offer special needs evaluations and fittings
- For additional information, consider these helpful sites:
 - www.ohiokidsaridingsafe.org/Parent/conditions.php
 - www.preventinjury.org/specNeeds.asp
 - www.chkd.org/carseats



Safety Restraint Misuse

- At least 4 out of 5 safety seats are unknowingly misused. Partial misuse of a safety seat reduces its effectiveness against severe injuries by half.
- Parents' top 3 mistakes include:
 - Failure to secure the seat tightly
 - Failure to secure the harness straps tightly
 - Incorrect positioning of the chest clip

- To help guard against misuse, parents should always:
- READ seat instructions, labels, and vehicle owner's manual
- Install the seat tightly (less than 1 inch of movement) & lock the safety belt
- Position the harness straps tightly

For installation help and more information, consider these helpful sites:

- www.aap.org/family/carseatguide.htm
- www.nhtsa.dot.gov (choose Child Safety Seats from the topics menu)
- www.preventinjuriesva.com (go to the child passenger safety section)
- www.chkd.org/carseats
- stokes.chop.edu/programs/carseat/
- www.usa.safekids.org/skbu/cps/index.html

To find a seat check event: www.nhtsa.dot.gov/cps/cpsfitting/index.cfm