

Rear-Facing Car Seat Basics



Selection - Direction Rear Facing until 2!

- ◆ Pennsylvania law requires children younger than 2 years of age to always ride in a rear-facing car seat.
- ◆ Secure infants and toddlers in a rear-facing car seat until they reach the highest weight or height allowed by the manufacturer of the car seat.
- ◆ Select a rear-facing car seat that allows the top of the child's head to be at least one-inch (1") below the top of the back of the car seat.

Installation

- ◆ Read and follow the car seat manufacturer's instructions for an acceptable rear-facing recline angle.
- ◆ When checking the recline angle, the vehicle must be on level ground.
 - ◆ Use the recline angle adjuster to determine the correct angle.
- ◆ Secure the car seat rear-facing with the vehicle seat belt or lower anchor connectors of the LATCH system.
 - ◆ Place the car seat on the vehicle seat and route the seat belt or lower anchor connectors through the correct belt path for rear-facing use following the car seat manufacturer's instructions.
 - ◆ Buckle the seat belt or attach the lower anchor connectors to the vehicle anchors and tighten.
 - ◆ Pull at the belt path to be certain there is no more than one-inch of side-to-side or front-to-back movement.



Rear-Facing Only Car Seat

- ◆ Portable and convenient car seats that accommodate small infants.
 - ◆ The weight range is from 3 - 4 pounds and goes up to 22 - 35 pounds.
- ◆ Many can be installed in the vehicle with a base that remains in the vehicle or installed without the base.
 - ◆ Extra bases can be purchased for use in several cars.

Convertible Car Seat

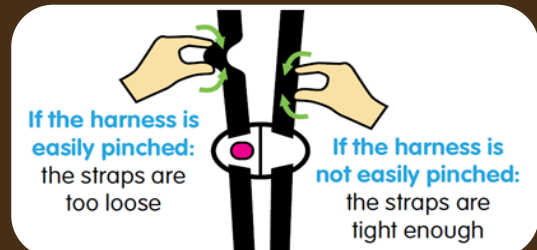
- ◆ Larger and stays secured in the car. Converts from rear-facing to forward-facing.
 - ◆ Rear-facing weight range is from 4 - 5 pounds and up to 40-50 pounds to accommodate rear-facing children longer.
- ◆ Typically a transition car seat between the rear-facing only car seat and a forward-facing car seat with a harness.
 - ◆ Recommended for children who are younger than 2 years of age who have outgrown their rear-facing only car seat.



How Tight Should the Harness Be?

The car seat harness should pass the "pinch test."

- ◆ Pinch the harness webbing vertically at the shoulder with the thumb and forefinger
- ◆ Your fingers should easily slide off the webbing.
- ◆ The webbing should not fold and pinch between your fingers.
- ◆ The harness should lie flat, and fit snugly (not uncomfortable) at the child's shoulders and hips.



Rear-Facing Car Seat Basics



Child's head is at least one-inch below the top of the car seat shell.

Harness is snug and you cannot pinch any extra webbing between thumb and forefinger.

Chest clip is at armpit level.



Harness straps are threaded through the slots that are at or below the child's shoulders.



Buckle webbing is threaded through the slot in the shell that is closest to child's body. The child should not be sitting on the harness buckle strap.

Tips to Achieve Correct Use of a Rear-Facing Car Seat

Selection

- Confirm the car seat is in good condition, and has not been recalled or reached the car seat manufacturer's expiration date.
- Read the car seat instructions and/or label to make sure the car seat is appropriate for the child's age, weight, and height.
- Confirm the car seat fits the vehicle and can be used correctly on every trip.

Direction

- Keep the child in a rear-facing car seat until age 2 or until they reach the maximum weight or height of the car seat.
- Secure the child in a forward-facing car seat once the child outgrows the rear-facing car seat.

Location

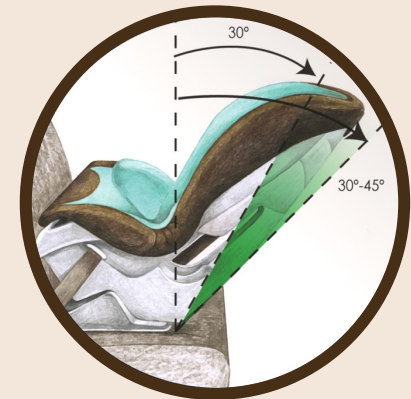
- Never place a rear-facing car seat in the front seat when there is an active front passenger-side air bag.
- Secure all children younger than 13 years of age in the back seat of vehicles for best protection.

Harness Adjustment and Fit

- Place the child with their back and bottom against the car seat back. Thread the harness straps through the correct slots **at or below** the child's shoulders following the car seat manufacturer's instructions.
- Secure the child with a snug harness. A snug harness does not permit excess webbing to be pinched at the shoulder once the harness is buckled and correctly tightened. Be sure to pull extra webbing from the hip area to the shoulders.
- Place the harness retainer clip at armpit level.

Installation

- Place the car seat on the vehicle seat, adjusting the recline angle following the car seat manufacturer's instructions.
- Thread and tighten the seat belt or lower anchor connectors through the correct rear-facing belt path.
- Confirm the car seat does NOT move side-to-side or front-to-back more than 1-inch when tested at the belt path.



Forward-Facing Car Seat Basics



Selection - Direction

- ◆ When children outgrow the rear-facing car seat, secure them in a forward-facing car seat with a harness for as long as possible, up to the highest weight or height allowed by the manufacturer of the car seat.
- ◆ Read the car seat instructions and/or label to make sure the car seat is appropriate for the child's age, weight, and height.
- ◆ Be aware of height and weight limits as a child grows.
- ◆ Select a forward-facing car seat where the mid-point of the back of the head or the top of the ears are not above the top of the car seat shell.
- ◆ Forward-facing car seats reduce the risk of injury for children by 71% compared to children using the seat belt only.

Installation

- ◆ Read and follow the car seat manufacturer's instructions to determine the appropriate upright or semi-upright angle when installing the car seat in the forward-facing position.
- ◆ Thread and tighten the seat belt or lower anchor connectors through the correct forward-facing belt path.
- ◆ Use the tether when installing the forward-facing car seat with the seat belt or the lower anchors, whenever possible.
- ◆ Confirm the car seat does NOT move side-to-side or front-to-back more than 1-inch when tested at the belt path.



Convertible Car Seat

- ◆ Converts from rear-facing to forward-facing.
- ◆ Secures child forward-facing once the child has outgrown the rear-facing height or weight limit.
 - ◆ Forward-facing weight range is from 20 - 25 pounds up to 40 - 65 pounds.
- ◆ Car seat instructions may recommend the forward-facing car seat be secured in the upright position.



All-In-One Car Seat

- ◆ Converts from rear-facing to forward-facing with a harness to a belt-positioning booster.
- ◆ Forward-facing harness weight range is 22 - 30 pounds up to 65 pounds.
- ◆ Once a child reaches the maximum weight or height limit for the harness system, remove or store the harness and use as a belt-positioning booster seat.



Combination Car Seat

- ◆ Converts from a forward-facing with a harness to a belt-positioning booster seat.
- ◆ Forward-facing weight range is 22 - 30 pounds up to 40 - 65 pounds.
- ◆ The back of a combination car seat is reinforced. Any harness slot can be used as long as it is at or above the child's shoulders.
- ◆ Once a child reaches the maximum weight or height limit for the harness system, remove the harness and use as a belt-positioning booster seat.



Harness Adjustment and Fit For Forward-Facing Car Seats

- ◆ The child is seated with their back and bottom against the back of the car seat.
- ◆ Harness adjustment:
 - ◆ Thread harness through the reinforced slots at or above the child's shoulders.
 - ◆ Place the harness over the child's shoulders and buckle.
 - ◆ The harness keeps the child in the car seat in a crash.
 - ◆ The crotch strap keeps the child from moving forward.
- ◆ Tighten the harness straps snugly.
 - ◆ A snug harness does not permit excess webbing to be pinched at the shoulder or hips once the harness is buckled.
- ◆ Place the harness retainer clip at armpit level.



Forward-Facing Car Seat Basics



The mid-point of the back of the child's head or the top of the ears are not above the shell of the car seat.

Harness is snug and you cannot pinch any extra webbing between thumb and forefinger.

Chest clip is at armpit level.



Harness straps are threaded through the slots that are at or above the child's shoulders.



The child is seated with their body in contact with the car seat back.

Tips to Achieve Correct Use of a Forward-Facing Car Seat

Selection

- Read the car seat instructions and/or label to make sure the car seat is appropriate for the child's age, weight, and height.
- Confirm that the child's ears are not above the top of the car seat shell. Be aware of minimum and maximum height, and weight limits.
- Seat the child in the car seat with their back and bottom in contact with the back of the car seat.
- A child should remain in a forward-facing car seat with a harness until reaching the maximum weight or height limit allowed by the car seat manufacturer.

Direction

- Check the car seat instructions to determine the correct forward-facing car seat angle. Car seats may need to be placed in the upright position or may allow for the car seat to be in a semi-upright position when forward-facing.



Location

- Choose a seating location that allows for the correct use and installation of the car seat.
- Determine whether the seat belt or lower anchor connectors will be used to secure the car seat. Read the car seat instructions and the vehicle manual to determine lower anchor weight limits. Weight limits on lower anchors and tether can affect whether the seat belt or lower anchors can be used to secure the car seat.
- Choose a seating location with a seat belt that can be locked and a tether anchor or with an approved LATCH system, (Lower Anchors and Tethers for Children).
- Secure all children younger than 13 years of age in the back seat of vehicles for best protection.

Harness Adjustment and Fit

- Place the harness through the harness slots **at or above** the shoulder following the car seat manufacturer's instructions. Assure the buckle is positioned close to the child.
- Secure the child with a snug harness. A snug harness does not permit excess webbing to be pinched at the shoulder once the harness is buckled and correctly tightened. Be sure to pull extra webbing from the hip area to the shoulders.
- Place the harness retainer clip at armpit level.

Installation

- Read and follow the car seat manufacturer's instructions for the appropriate upright or semi-upright angle when installing the car seat in the forward-facing position.
- Thread and tighten the seat belt or lower connectors through the correct forward-facing belt path. Do not exceed the maximum weight limit of the lower anchors.
- Attach and secure the tether when using the seat belt or lower anchors, whenever possible.
- Confirm the car seat does NOT move side-to-side or front-to-back more than 1-inch when tested at the belt path.

Belt-Positioning Booster Seat Basics



Selection

- ◆ When children outgrow the forward-facing car seat, secure them in a belt-positioning booster seat with a lap and shoulder belt until the seat belt fits correctly, typically when a child is approximately 4 feet 9 inches tall and between 8 and 12 years of age.
- ◆ Select a booster seat that positions the vehicle's lap belt low and snug across the hips/upper thighs and the shoulder belt across the center of the child's shoulder and chest.
- ◆ Belt-positioning booster seats lower the risk of injury for children ages 4 to 8 by 45% compared to children using the seat belt alone.

Direction - Location

- ◆ Place the belt-positioning booster seat forward-facing and flat on a vehicle seating position with a lap and shoulder belt.
- ◆ Confirm the child's ears are not above the back of the vehicle seat or the top of the booster seat's head restraint.
- ◆ Secure all children younger than 13 years in the back seat of vehicles for best protection.
 - ◆ If a booster seat is permitted for use in the front seat, move the front seat back as far as possible.



Seat Belt Adjustment and Fit

- ◆ Use a lap and shoulder belt with belt-positioning booster seats.
 - ◆ Some high-back booster seats have adjustable seat backs. Adjust the booster seat back or shoulder belt positioner level with or just above the child's shoulders, following the car seat instructions.
 - ◆ Lap belt positioned low, across the child's hips, touching the upper thighs.
 - ◆ Shoulder belt placed across the center of the child's chest and shoulder.
 - ◆ The shoulder belt is in contact with the child's shoulder.
 - ◆ Seat belt is routed correctly through the booster seat belt path.



Pennsylvania Law

All drivers transporting children 4 years of age or older but under 8 years of age are responsible to securely restrain those children in a seat belt system and an appropriately fitting child booster seat. (Primary Law)

Installation

- ◆ Check the car seat instructions for information on securing the booster seat.
- ◆ Most booster seats rest on the vehicle seat and are not locked in place.
 - ◆ Some booster seats have lower anchors to position and keep the booster seat in place.
 - ◆ Some booster seats may also permit use of a tether.
- ◆ The lower anchor connectors secure the booster seat and the seat belt secures the child. Lower anchor weight limits do not apply to booster seats.
- ◆ Thread the vehicle's lap and shoulder belts through the correct belt path and buckle.



Belt-Positioning Booster Seat Basics



Adjust the head restraint height so the shoulder belt guides are at or slightly above the top of the child's shoulders.

Shoulder belt is placed across the center of the chest and shoulder and in contact with the child's shoulder.

Lap belt is positioned low, across the child's hips, touching the upper thighs.



Position the height of the booster seat or vehicle seat head restraint to provide support for the child's head. The child's head should not be above the top of the booster seat's head restraint or the back of the vehicle seat/head restraint.

Tips to Achieve Correct Use of a Belt-Positioning Booster Seat (Booster Seat)

Selection

- Select a belt-positioning booster seat only when the child has outgrown a forward-facing car seat with a harness.
- Read the booster seat instructions and/or label for the weight and height ranges and guidance on correct use.
- The top of the child's ears should not be above the vehicle seat or the top of the booster seat's head restraint.

Direction

- Place the belt-positioning booster seat forward-facing and flat on the vehicle seat.
- Confirm the child has appropriate head support from the car seat head restraint or the vehicle seat or vehicle's head restraint.

Location

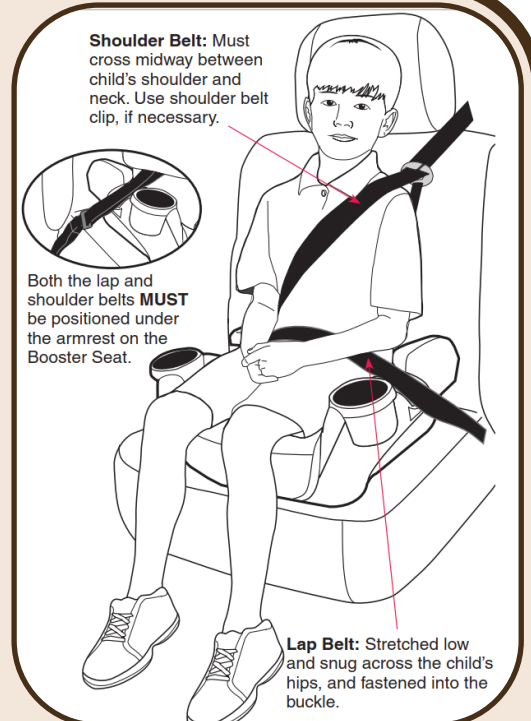
- Select a seating position with a lap and shoulder belt.
- Confirm the child has appropriate head support from either the vehicle seat/head restraint or the back of the booster seat.
- Secure all children younger than 13 years in the back seat of vehicles for best protection.

Harness Adjustment and Fit

- Confirm the lap and shoulder belts are laying flat against the child's body.
- Position the shoulder belt across the center of the chest and shoulder. Use the shoulder belt guide on the booster seat for correct placement of the shoulder belt.
- Position the lap belt low and across the child's hips. The lap belt is generally placed under the booster seat arm rests, but not always. Follow the car seat manufacturer's instructions for correct belt routing.

Installation

- Read the vehicle owner's manual for information on adjusting the lap and shoulder belts and the head restraint.
- Always use a lap and shoulder belt to secure a child seated in a belt-positioning booster seat.
- Some belt-positioning booster seats have lower anchors to position and keep the seat in place.
 - Lower anchor weight limits do not apply to booster seats.
- Thread the vehicle's lap and shoulder belts through the correct belt path and buckle.



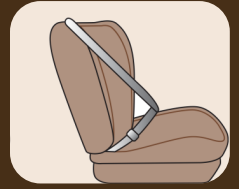
Shoulder Belt: Must cross midway between child's shoulder and neck. Use shoulder belt clip, if necessary.

Both the lap and shoulder belts **MUST** be positioned under the armrest on the Booster Seat.

Lap Belt: Stretched low and snug across the child's hips, and fastened into the buckle.

Example: Booster seat instructions on lap and shoulder seat belt routing.

Vehicle Seat Belt Basics



Selection

- ◆ When children outgrow the belt-positioning booster seat, secure them in a properly fitted lap and shoulder belt.
- ◆ A lap and shoulder belt fits correctly when the lap belt lays low and snug across the hips, touching the upper thighs and the shoulder belt fits across the center of the chest and shoulder.
- ◆ Lap and shoulder seat belts reduce risk of injury for children by 45%.



A vehicle seat belt is safe for a child when:



Without slouching, their back is in contact with the vehicle seat when seated.



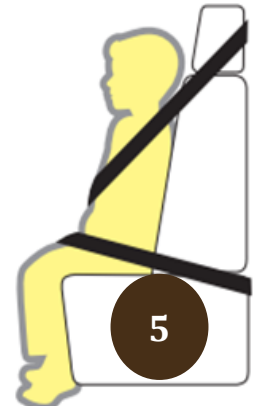
Their knees bend over the front edge of the vehicle seat and their feet are flat on the floor.



The lap belt lies low and snug across the hips, touching the upper thighs.



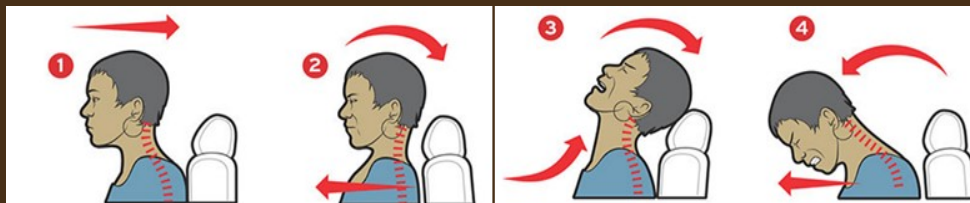
The shoulder belt lies snugly across the center of the chest and shoulder.



The child can stay seated with the lap and shoulder belt correctly positioned for the entire trip.

CORRECT HEAD RESTRAINT

A head restraint that is too low or far back will not protect your head and neck in a crash.

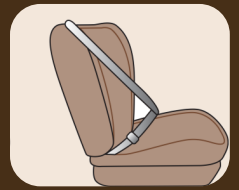


The four images illustrate a typical impact.

Direction - Location

- ◆ Secure all children younger than 13 years in the back seat of vehicles for the best protection.
 - ◆ If a child is secured in the front seat, move the vehicle seat back as far as possible.
- ◆ Confirm the child's ears are not above the back of the vehicle seat or head restraint.
 - ◆ If the head restraint is adjustable, change the height so it is positioned behind the child's head.

Vehicle Seat Belt Basics



Adjust the head restraint height so that it is directly behind and close to the child's head.

Lap belt is positioned low, across the child's hips, touching the upper thighs.



Shoulder belt is placed across the center of the chest and shoulder and in contact with the child's shoulder.

Note:
Drivers who buckle up are more likely to have child passengers who buckle up.

Tips to Achieve Correct Use of a Seat Belt

Selection

- Secure children in a seat belt when they are big enough for the seat belt to fit correctly.
- Select a seating position that has a lap and shoulder belt.
 - Select a lap only belt seating position if necessary. A lap belt provides no upper body protection, but is better than no seat belt.

Direction

- Secure the seated child forward-facing on the vehicle seat.
- Confirm the child has appropriate head support from the vehicle seat or head restraint.

Location

- Select a seating position with a lap and shoulder belt.
- Confirm the child has appropriate head support from either the vehicle seat or head restraint.
 - The top of the child's ears should not be above the vehicle seat or head restraint. Position the head restraint:
 - At least as high as the top of the ears, and preferably the top of the head, and
 - As close to the back of the head as is comfortable.
- Secure all children younger than 13 years in the back seat of vehicles for best protection.

Harness Adjustment and Fit

- Confirm the lap and shoulder belt are laying flat against the child's body, positioned across the center of the chest and low and snug across the hips.
 - Confirm the shoulder belt is not placed under the arm or behind the back.

Installation

- Read the vehicle owner's manual for information on adjusting the lap and shoulder belts and the head restraint.
- Always use a lap and shoulder belt to secure a child.
- Confirm that a child is seated in the proper position for the length of travel.

Air bags are Designed to Work with Seat Belts



- ♦ Air bags are designed to work with seat belts.
- ♦ Both frontal and side-impact air bags are generally designed to deploy in moderate to severe crashes and may deploy in even a minor crash.
- ♦ Air bags reduce the chance that your upper body or head will strike the vehicle's interior during a crash.
- ♦ Read the vehicle owner's manual for information about air bags in the vehicle.