

Car Seat Safety: Harnessing

Always read and follow the car seat instructions to correctly position and fit the harness on the child. The car seat harness is designed to:

- ◆ Keep the child in the car seat and vehicle during a crash.
- ◆ Contact the strongest parts of the child's body.
- ◆ Manage the crash forces when correctly positioned
- ◆ Protect the head, brain, neck, and spinal cord..

Correct shoulder harness height is critical when securing the child and can reduce the child's movement in the event of a sudden stop or crash. As the child grows, it's important to regularly check the harness fit and adjust as needed to provide the best protection during a crash.

CHECKING THE FIT OF YOUR CHILD'S CAR SEAT HARNESS

A SECURE HARNESS KEEPS YOUR CHILD SAFER IN A CRASH BY SPREADING THE CRASH FORCES ACROSS THE STRONGEST AREAS OF THE BODY – THE HIPS AND CHEST.

Four Steps to Correctly Place a Child in a Car Seat

1. Place the **child all the way back** in the car seat. The child's back and bottom should be in contact with the back and bottom of the car seat.
2. Place the harness straps in the **correct harness slots for the child**.
 - ◆ **Rear-Facing:** The harness is placed **AT or BELOW** the child's shoulders.
 - ◆ **Forward-Facing:** The harness is placed **AT or ABOVE** the child's shoulders.
3. Tighten the **harness straps snugly**.
 - ◆ "A snug strap should NOT allow any slack. It lies in a relatively straight line without sagging. It does not press on the child's flesh or push the child's body into an unnatural position."
4. Place the **harness retainer clip at armpit level**.



Rear - Facing

When a child is rear-facing, the harness straps should be through a slot on the back of the car seat that is **AT or BELOW** shoulder level.

The correct placement of the shoulder harness in a rear-facing car seat is **at or below** the child's shoulders. Correct shoulder harness height is essential to correctly secure the child and to reduce movement in the event of a sudden stop or impact. The less movement that occurs, the less violent forces the child will experience in a collision.



In a frontal crash, the most common type, the child secured in a rear-facing car seat will be pressed against the back of the car seat and keep the child's body from sliding upwards. The harness straps, positioned **at or below** the child's shoulders, will hold the child down in the car seat.

Harness straps positioned above a rear-facing child's shoulders allow the child to ride up the back of the car seat possibly exposing the child's head above the car seat shell, increasing the potential for a head injury. Placing the harness in a slot above the shoulder has a similar effect as not fully tightening the harness.

Pennsylvania law requires children younger than 2 years of age to be secured in a rear-facing car seat. **For the best possible protection, keep children rear-facing until they reach the maximum weight or height limit recommended by the car seat manufacturer and listed in the instruction manual and on the labels.**

- Select a rear-facing car seat that allows the head to be at least one inch below the top of the back of the car seat.
- If a child outgrows a rear-facing only car seat before age 2, use a rear-facing convertible / All-in-1 car seat to the highest weight or height allowed by the car seat manufacturer.

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.

Forward - Facing

When a child is forward-facing, the harness straps should be through a slot on the back of the car seat that is **AT or ABOVE** shoulder level.

The correct placement of the shoulder harness in a forward-facing car seat is **at or above** the child's shoulders. Correct shoulder harness height is most effective in decreasing the amount of distance the child will travel when thrown forward. The decrease in movement results in less violent forces the child will experience in the crash.



In a frontal collision, a child secured in a forward-facing car seat will move forward into the harness straps, limiting the child's movement. Harness straps positioned below the child's shoulders in a forward-facing car seat will allow for the body to move further forward during the crash due to the extra webbing.

Read the car seat instructions to determine which harness slots can be used when securing a forward-facing child.



READ THE MANUALS

KEEP YOUR CAR SEAT AND VEHICLE MANUALS HANDY TO GUIDE YOU THROUGH INSTALLATION



Harnessing Tips & Common Misuse

CHECK THE STRAP PLACEMENT

REAR-FACING CAR SEAT

FORWARD-FACING CAR SEAT



STRAPS SHOULD ORIGINATE AT OR BELOW THE SHOULDERS



STRAPS SHOULD ORIGINATE AT OR ABOVE THE SHOULDERS

Rear-Facing Correct Use
Snugly secure the harness **At or Below** the child's shoulders to better secure the child from sliding upwards.

Forward-Facing Correct Use
Snugly secure the harness **At or Above** the child's shoulders to better secure the child from moving forward.

Why are the Harness Straps Positioned Differently for Rear-Facing and Forward-Facing Car Seats?

During a frontal crash, the forces will cause a **rear-facing** child's body to ride up the back of the car seat shell. The harness straps positioned **at or below** the child's shoulders firmly holds the child down in the car seat, preventing the child from sliding up the back of the car seat.



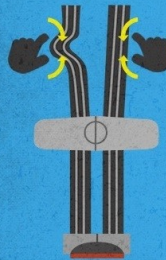
During a frontal crash, the forces will cause a **forward-facing** child to be thrown forward. The harness straps positioned **at or above** the child's shoulders is most effective in decreasing the distance the child will travel when propelled forward and limits the forces on the child's spine and shoulders.



MAKE SURE THE HARNESS IS SNUG



THE HARNESS SHOULD LIE FLAT AND FIT SNUGLY



"PINCH TEST" - STRAPS SHOULD NOT BE EASY TO VERTICALLY PINCH



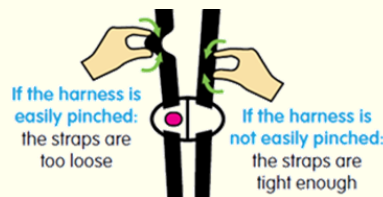
AVOID BULKY CLOTHING- PLACE COATS OR BLANKETS OVER THE HARNESS

Loose harnesses do not properly secure a child in a crash, increasing the child's movement toward the point of impact and a possible ejection from the car seat.

How Tight Should the Harness Be?

The harness should pass the "pinch test." When pinching the harness webbing vertically at the shoulder with the thumb and forefinger, your fingers should slide off easily and you should NOT be able to pinch any webbing between them.

The harness should lie flat, and fit snugly (not uncomfortably) at the child's shoulder and hips.



CHECK THE PLACEMENT OF THE CHEST CLIP



THE CHEST CLIP SHOULD BE PLACED AT THE CHILD'S ARMPIT LEVEL

The harness retainer clip (chest clip) is designed to pull the harness straps together to keep harness straps correctly positioned over the child's body. The shoulder straps are placed across the child's shoulders and the harness retainer clip is positioned at armpit level.

Why is the Position of the Harness Retainer Clip Important?



When the harness retainer clip is:

- **Too High:** The child could suffer an injury to the neck in a sudden stop or crash.
- **Too Low:** The harness straps could slide off the shoulders, allowing the child to slip out of the harness, increasing the possibility that the child could be ejected in a crash.

