

# Children in Booster Seats & Seat Belts

## OBJECTIVES

- Identify how booster seats protect children.
- Differentiate between types of booster seats.
- Install a booster seat.
- Explain recommendations for children in seat belts.
- Explain best practices about booster seats and seat belts to caregivers.

## HOW BOOSTER SEATS PROTECT CHILDREN

Children should be in **belt-positioning booster seats** until they are big enough to fit properly in a seat belt.

- This is best practice, however, you will see children being moved into a seat belt at much younger ages because the caregivers believe the children are ready.
- Some booster seats are not tightly installed (locked in place) in the vehicle as with car seats.
- Booster seats are held in place by the child's weight and the vehicle's lap-and-shoulder belt.
  - These seats boost children up for correct seat belt fit.
  - Some new booster seats have lower anchor connectors to hold the seat in place when the child is not present.
- Skipping the booster seat step or "graduating" to a booster seat too early is common and unsafe.



*Booster seats protect children*

***Booster seats protect children by increasing crash protection from injuries.***

### Booster seats:

- Are a middle step between a car seat with a harness and a seat belt to protect children who are too large for a car seat and too small for just the seat belt.
- Raise and position a child so the vehicle's lap-and-shoulder belt fit properly over the stronger parts of a child's body.

**Booster seats are more than twice as effective in reducing risk of injury when compared with seat belts alone.**

*CHOP Study, 2003*



VIDEO • Booster Seat Vs. Lap Belt

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*Video courtesy of Children's Hospital of Philadelphia (CHOP)*



VIDEO • Booster Seat Vs. Lap-and-Shoulder Belt

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*Video courtesy of Children's Hospital of Philadelphia (CHOP)*

**BOOSTER SEAT FACTS**

- Booster seats and seat belts continue to protect children in the back seat of vehicles. Children should be in the back seat when under 13 because it is safer.
- The booster seat keeps the lap belt from causing injury to a child's abdomen and keeps the shoulder belt in proper position to give the child upper body protection.
- Children should be moved to a belt-positioning booster seat only when they have outgrown the height or weight limit of their forward-facing car seat. Many booster seats have weight ranges starting at 40 pounds and ending at much higher limits.

*Booster seats must NOT be used with lap-belt-only seat belts. Serious head and/or internal injuries can result from excessive head movement and jackknifing over the lap belt.*

Booster seats:

- Must **NEVER** be used with just a lap belt.
- Are **NEVER** used on airplanes.
- May fit children up to 80 or 100+ pounds or more depending on specific models.

**NOTE: ALWAYS** consult the booster seat owner's manual for the weight ranges and correct use of booster seats.

## TYPES OF BOOSTER SEATS

There are two types of booster seats: high-back and backless booster seats.

### High-Back Booster Seats

**High-back booster seats** are recommended for vehicles that have a low seat back or do not have a head restraint. A low seat back does not offer any support for a child's head.

- High-back booster seats provide head, neck, and back support for the child.
- When correctly positioned on a booster seat, vehicle seat belts fit over the shoulder and hips like an adult in a seat belt.
- Use only shoulder belt positioners provided with the booster seat.
- Some high-back booster seats can only be used with vehicle head restraints behind them.
- Some high-back booster seats can be used as backless booster seats by removing the back.



*High-back booster seat*

When a child has outgrown the height or weight limits of the internal harness of a combination car seat, the harness can be stored after removal and the seat can be used as a high-back booster.

Caregivers must carefully follow the manufacturer instructions for changing the combination car seat to a booster seat. Some seats have bases that also need to be removed to use as a booster seat.



*Converted combination car seat to a high-back booster seat*

### Backless Booster Seats

With a **backless booster seat**, the child uses the vehicle's seat back or built-in head restraint for head, neck, and back support.

- ☑ Use only with a lap-and-shoulder belt in a vehicle seating position with head restraints.
- ☑ Most backless booster seats come with a shoulder belt positioner to adjust the shoulder belt height on the child.
- ☑ The child's ears should **NOT** be above the back of the vehicle seat or top of the head restraint.



*Backless booster seat*

## Booster Seats in the Front Seat

If a child must ride in the front seat:

- The child must be correctly restrained in a booster seat using the vehicle's lap-and-shoulder belt.
- The vehicle seat must be moved back as far as possible from the dashboard.

### INSTALL A BOOSTER SEAT



VIDEO • Install a Booster Seat

Record steps you observe to install a booster seat.

1. \_\_\_\_\_  
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2. \_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_  
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4. \_\_\_\_\_  
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5. \_\_\_\_\_  
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Even if the child is not present, booster seats should be secured in the vehicle at all times. When not buckled, the booster seat may become a projectile or object that can be tossed around the vehicle causing injury to vehicle occupants during a crash or sudden stop.

### TIPS FOR DISCUSSING BOOSTER SEATS

- Use the term “belt-positioning booster seat” when working with caregivers. This helps to emphasize how lap-and-shoulder belts keep the booster seats in place and keep children safe.
- Share benefits of booster seats with caregivers. For example, they help children see out the window better (since they are “boosted up”). This may help when caregivers talk to children about why they might like riding in a booster seat.
- Some forward-facing combination seats may allow for connecting the child restraint to the vehicle using LATCH even when used as a booster seat. However, some high-back boosters can only be used with a seat belt.

*Booster seat use may be a hard sell to the child, especially if the child was moved to a seat belt too early!*



### Practice Activity: Install a Booster Seat

Practice training caregivers how to correctly install booster seats.

1. Read the manufacturer's instructions to see how lap-and-shoulder belts are supposed to be positioned over and around the child and booster seat.
2. Focus on the following questions as you practice your installations.
  - Is the booster seat flat on the back seat of the vehicle?
  - Are there vehicle seat shoulder belt guides?
  - Might the vehicle head restraint need to be adjusted?
  - Is the booster seat height adjustable?

### INSTALL A BOOSTER SEAT

Follow these steps to correctly install a booster seat.

1. Place the booster seat flat in the back seat.
2. Have the child sit and buckle the seat belt.
3. Make sure the seat belt fits properly with the lap belt low across the upper thighs and shoulder belt across the chest.
4. Adjust the vehicle's seat belt or booster seat guides, if available and be sure to position according to booster seat manufacturer instructions.
5. With a backless booster seat, adjust the head restraint, if needed.



### Explain Best Practices About Booster Seats to Caregivers

There are key questions to answer related to booster seats. Explain and demonstrate best practices to caregivers.

#### Key Questions

- What are the height and weight of the child?
- What are the height and weight limits of the booster seat?
- Should the booster seat be used with a vehicle head restraint?
- Are the child's ears above the back of the vehicle seat (in a backless booster seat) or top of the head restraint (in a high-back booster seat)?
- Do the child's knees bend comfortably so the child does not slouch?

#### Best Practices

Answer the following questions to prepare for conversations you will have with caregivers to educate them about booster seats.

1. Why is it important to use booster seats?

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2. When should a child move to a booster seat?

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Best Practices (continued)

3. Is there a weight and/or height requirement for a booster seat?

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4. What is the proper placement of the lap-and-shoulder belt?

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RECOMMENDATIONS FOR CHILDREN IN SEAT BELTS

Seat belts can be used to safely secure a child in a vehicle when he or she is:

- Tall enough to sit without slouching.
- Able to keep his or her back against the vehicle seat.
- Able to keep his or her knees naturally bent over the edge of the vehicle seat.
- Able to keep his or her feet flat on the floor.



*Proper fit in seat belts*

The lap belt must lie snugly across the upper thighs – **NOT** the stomach. The shoulder belt should lie snug across the shoulder and chest and **NOT** cross the neck or face.

Children:

- Must stay in position for the entire ride.
- Should **NEVER** have the shoulder belt under their arm or behind their back. This can cause severe injuries in a crash. If the seat belt does not fit properly, a child should use a booster seat.
- Under 13 should ride in the back seat. If a child is in the front seat, the vehicle seat must be moved back as far as possible from the dashboard.
- Should **NOT** lean or rest against air bags, including side air bags.



VIDEO • Beyond Booster Seats

Record steps you observe to secure a seat belt.

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TIPS FOR DISCUSSING BOOSTER SEATS AND SEAT BELTS

- Emphasize to caregivers that they are important role models for the safe behavior of children.
- With car pools, emphasize that caregivers should make certain booster seats and seat belts are used correctly every time children ride in a vehicle.
- While lap belts are not ideal, they are better than no protection at all!

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*“When I tell people that I have completed the child passenger safety certification training program and that it was an intensive experience, I usually hear, “Really?” Yes, and every minute is worth it. Hats off to all the CPS Technicians out there who provide much needed education to help keep kids safe. It’s an honor to have joined your ranks.”*

**Kate Carr, Safe Kids Worldwide  
CEO and President**

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## Progress Check: Identify Seat Belt Errors and Consequences

1. Examine each photograph to determine if the seat belt is fitted properly.
2. If not fitted properly, identify the errors along with the consequences for the child.

1.



**Error:** \_\_\_\_\_

**Consequences:** \_\_\_\_\_

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2.



**Error:** \_\_\_\_\_

**Consequences:** \_\_\_\_\_

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3.



**Error:** \_\_\_\_\_

**Consequences:** \_\_\_\_\_

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Error: \_\_\_\_\_

Consequences: \_\_\_\_\_

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Error: \_\_\_\_\_

Consequences: \_\_\_\_\_

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### SEAT BELT SYNDROME

**Seat Belt Syndrome (SBS)** describes injuries that doctors see as a result of occupants wearing only a lap belt in collisions involving only the front of a vehicle. These injuries usually result when the occupant's body folds in half over the lap belt during a collision.

- When this happens, the lap belt applies extreme force along the occupant's pelvis to the mid-section.
- Securing only the waist without restraining the upper body can cause serious head and neck injuries after a head strike.

Injuries typically include:

- Severe stomach injuries.
- Fractures of the lumbar spine.
- Serious head and facial injuries.



*SBS can cause serious head and neck injuries*



## Explain Best Practices About Seat Belts to Caregivers

There are key questions to answer related to seat belts. Explain and demonstrate best practices to caregivers.

### Key Questions

Is the child:

- Tall enough to sit without slouching?
- Able to keep his or her knees naturally bent over the edge of the vehicle seat?
- Able to sit all the way back against the vehicle seat?
- Able to keep his or her feet flat on the floor?
- Sitting with the shoulder belt crossing the shoulder between the neck and the arm?
- Sitting with the lap belt as low as possible, touching his or her thighs?
- Able to stay seated this way for the whole trip?

### Best Practices

Follow these guidelines for a proper seat belt fit.

1. The lap belt must lie snugly across the upper thighs – **NOT** the stomach.
2. The shoulder belt should lie snug across the shoulder and chest and **NOT** cross the neck or face.



## Progress Check: Seat Belt Use

**Scenario:** My child has used a seat belt since he was 4 years old. What should I do now that he is 6 years old?

1. What is the proper seat belt use for this situation?

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2. When can a child move to a seat belt?

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