



H ow to Protect Children in Vehicles with Side Air Bags

February 2001

Keeping Children Safe in Your Vehicle

Air bags save lives. However, children must be properly seated and restrained at all times. This fact sheet tells you about the four stages of child safety in vehicles equipped with side air bags. No matter what the age of your child, it is important to follow some basic guidelines when travelling with children in your vehicle.

Basic Guidelines

- *Use the appropriate child restraint correctly.*
- *Keep children in the rear seat (the "KID ZONE").*
- *Keep kids out of the way of all air bags.*
- *Keep toys, blankets and other objects from getting between your child and an air bag.*
- *Check the child's position throughout the journey.*

For details on each stage of child restraint use, see page 4.

Why Side Air Bags?

A number of car manufacturers now offer side-mounted air bags as standard or optional safety equipment for front seat passengers. Side air bags protect drivers and front seat adult passengers in certain side-impact collisions. A much smaller number of manufacturers offer side-mounted air bags in the rear seat as standard or optional equipment. Take a moment to read your owner's manual and identify *where* the side air bags are located in your vehicle. The following table briefly describes the different types of side air bag:

Side Air Bag Types	Description
<i>Roof-mounted systems</i>	Curtains and head tubes come out from the roofline along the upper edge of the doors. These air bags come down along the window to protect your head and neck.
<i>Door-mounted systems</i>	Door-mounted air bags break out of the armrest or the door just above the armrest. When fully inflated these air bags are about the size of a plastic grocery bag filled with air. These air bags protect your chest.
<i>Seat-mounted systems</i>	Seat-mounted air bags come out through the side of the seat back cushion closest to the door. Some air bags will inflate to the size of a small cushion, while others can inflate to the size of a large pillow. The smaller air bags protect your chest, while the larger ones protect your chest and head.

Side Air Bags: Today and Tomorrow

Transport Canada has conducted extensive tests on side air bags with child crash test dummies. While testing is still ongoing, two main conclusions stand out:

1. Children who are leaning against a side air bag when it inflates are at risk of serious injury.
2. Children who are kept away from the path of the side air bag — for example, children travelling in age-appropriate, correctly installed child restraints — are not at risk of serious injury.

Transport Canada has signed a Memorandum of Understanding with Canadian and international motor vehicle manufacturers. Manufacturers have agreed to design future air bags to meet the requirements of side air bag test protocols recommended by the Side Air Bag Out-of-Position Injury Technical Working Group.

Until new side air bags designed to minimize the risk of injury enter the Canadian automobile market, Transport Canada recommends that you follow precautions contained in this fact sheet.

If you would like additional information on child safety and side air bags or on the deactivation of side air bags, please contact our Information Centre at: 1-800-333-0371 or e-mail us at:

RoadSafetyWebmail@tc.gc.ca

Or visit our Web site at:

www.tc.gc.ca/roadsafety

Remember that the best way to protect children from the danger of collisions or sudden stops is to restrain them properly in the rear seat of your vehicle — the ("KID ZONE") — the safest place for children aged 12 or under.

Stage One: Rear-Facing Infant Seat

Side Air Bags and Rear Seat Travel

- **The safest position for a rear-facing infant seat is in the rear seat.**
- Install the rear-facing infant seat according to manufacturer's instructions, placing it in the centre position of the rear seat whenever possible.
- Tightly secure the infant seat with the seat belt so that the base doesn't slide or move more than 2.5 cm (1 inch) in any direction.
- If you chose to install the infant seat next to a door, clear the area between the infant seat and the door of all objects. Toys, blankets, and even pillows could harm your baby if the side air bag inflates.

Side Air Bags and Front Seat Travel

- **Never place an infant seat in the front seat of a vehicle equipped with a front air bag unless the air bag has been *deactivated*.**
- If the front passenger air bag has been deactivated and you have **no alternative** but to travel with your baby in the front seat of a vehicle:
 1. Adjust the front passenger seat to the rearmost track position by sliding the seat back as far as it will go.
 2. Install the rear-facing infant seat according to manufacturer's instructions. Tightly secure it with the seat belt so that the base doesn't slide or move more than 2.5 cm (1 inch) in any direction.
- Clear the area between the infant seat and the door of all objects. Toys, blankets, and even pillows could harm your baby if the side air bag inflates.

0–10 kg (22 lb.)
Birth to around 1 year old

Recommended restraint:
Rear-facing infant seat

- *For heavier babies, use an infant/child seat that allows a higher weight in the rear-facing position. Refer to manufacturer's instructions for weight limits in the rear-facing position.*

Recommended position:
Rear seat of the vehicle (the "KID ZONE")

Stage Two: Forward-Facing Child Seat

Side Air Bags and Rear Seat Travel

- **The safest position for a forward-facing child seat is in the rear seat.**
- Install the forward-facing child seat according to manufacturer's instructions, placing it in the centre position of the rear seat whenever possible.
- Tightly secure it with the seat belt and the top tether strap so that the base doesn't slide or move more than 2.5 cm (1 inch) in any direction.
- If you chose to install the child seat next to a door, clear the area between the child seat and the door of all objects. Toys, blankets, and even pillows could harm your child if the side air bag inflates.

Side Air Bags and Front Seat Travel

- **Never place a child seat in the front seat of a vehicle equipped with a front air bag unless the air bag has been *deactivated*.**
- **Never place a child seat in the front seat of a vehicle that doesn't have a tether anchorage location.**
- If the front passenger air bag has been deactivated and you have **no alternative** but to travel with your child in the front seat of a vehicle:
 1. Adjust the front passenger seat to the rearmost track position by sliding the seat back as far as it will go.
 2. Install the forward-facing child seat according to manufacturer's instructions. Tightly secure it with the seat belt and top tether strap so that the base doesn't slide or move more than 2.5 cm (1 inch) in any direction.
- Clear the area between the child seat and the door of all objects. Toys, blankets, and even pillows could harm your child if the side air bag inflates.

**10–18 kg (22–40 lb.)
About 1–4½ years old**

Recommended restraint:
Forward-facing child seat

- *You will find that some child seats can be used longer — until your child weighs 22 kg or 48 lb. Refer to manufacturer's instructions for weight limits in the forward-facing position.*

Recommended position:
*Rear seat of the vehicle
(the "KID ZONE")*

Stage Three: Booster Seat

Side Air Bags and Rear Seat Travel

- **The safest position for a booster seat is in the rear seat.**
- Select a seating location away from side air bags whenever possible. Install the booster seat according to manufacturer's instructions, ensuring your child is properly buckled up.
- If you place the booster seat near a door, clear the area between the booster seat and the door of all objects. Toys, blankets, and even pillows could harm your child if the side air bag inflates.
- On the road, remind your child not to lean out of the booster seat and to keep his or her head, arms and feet away from the door.
- Check your child's position frequently throughout the journey.

Side Air Bags and Front Seat Travel

- **Never place a booster seat in the front seat of a vehicle equipped with a front air bag unless the air bag has been *deactivated*.**
- If the front passenger air bag has been deactivated and you have **no alternative** but to travel with your child in the front seat of a vehicle:
 1. Adjust the front passenger seat to the rearmost track position by sliding the seat back as far as it will go.
 2. Install the booster seat according to manufacturer's instructions, ensuring your child is properly buckled up.
- Clear the area between the booster seat and the door of all objects. Toys, blankets, and even pillows could harm your child if the side air bag inflates.
- On the road, remind your child not to lean out of the booster seat and to keep his or her head, arms and feet away from the door.
- Check your child's position frequently throughout the journey.

**18–27 kg (40–60 lb.)
About 4½–8 years old**

Recommended restraint:
Booster seat

- *You may find that a high-back booster seat will do the best job of preventing your child from leaning against the door.*
- *Some booster seats can be used longer. Refer to manufacturer's instructions for weight and height limits.*

Recommended position:
*Rear seat of the vehicle
(the "KID ZONE")*

Stage Four: Seat Belt

Side Air Bags and Rear Seat Travel

- **The safest position for a child aged 12 or under is in the rear seat.**
- Select a seating location away from side air bags whenever possible. Make sure your child is properly buckled up, with the lap belt low and snug over the hips and the shoulder belt across the chest. Never place the shoulder belt behind the child or under the arm.
- If you have no **alternative** but to place your child in a seat equipped with a side air bag:
 1. Fasten the seat belt as above.
 2. Have your child *sit up straight* and remind your child not to lean against the door at any time.
 3. Ensure the area between your child and the door is clear of all objects. Toys, blankets, and even pillows could harm your child if the side air bag inflates.
- Check your child's position frequently throughout the journey.

Side Air Bags and Front Seat Travel

- **Don't let children travel in the front seat of a vehicle equipped with a front passenger air bag unless the air bag has been deactivated.**
- If you have **no alternative** but to travel with your child in the front seat of a vehicle:
 1. Adjust the front passenger seat to the rearmost track position by sliding the seat back as far as it will go.
 2. Make sure your child is properly buckled up, with the lap belt low and snug over the hips and the shoulder belt across the chest. Never place the shoulder belt behind the child or under the arm.
 3. Have your child *sit up straight* and remind your child not to lean against the door at any time.
 4. Ensure the area between your child and the door is clear of all objects. Toys, blankets, and even pillows could harm your child if the side air bag inflates.
- Check your child's position frequently throughout the journey.

**Over 27 kg (60 lb.)
About 8–12 years old**

Recommended restraint:
Seat belt

Recommended position:
*Rear seat of the vehicle
(the "KID ZONE")*