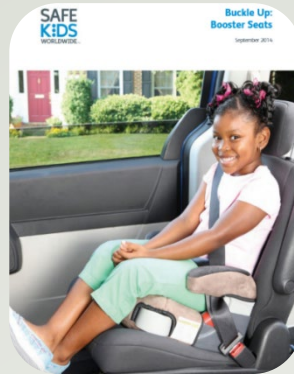


Child Passenger Safety

From Infants to Teens



Presentation Overview

- Why buckle kids up?
 - Alberta law
 - Common safety errors
 - Car seat stages and types of car seats
 - Tips for buying car seats and booster seats
 - Where to get more information
 - Questions and answers
-

Learning Objectives

To provide participants information on:

- The safest way to secure children in vehicles
- How to choose which car seat or booster seat to purchase
- Car seat laws in Alberta

Why buckle kids up?

- Car crashes are the leading cause of child deaths and injuries in Canada
- Car seats can reduce deaths by as much as 71% (Canadian Paediatric Society, 2008)
- Unrestrained children are 7 times more likely to have traumatic brain injury (concussions) compared with children in appropriate restraints (Centre for Disease Control, 2008)
- Correct use of car seats and booster seats save lives



Car Seats Save Lives



As severe as the damage to the vehicle was (rollover, driver's side roof crushed, rear wheel torn off, all windows broken), the mom and both children were shaken but not injured at all. Both children were correctly buckled up in car seats. Both car seat were securely installed. The mother had checked the seats to make sure everything was done up right.

Alberta Law

- Drivers and passengers must use a seat belt or car seat
- Drivers are responsible for passengers under 16 years old
- Car seats are needed for children under 6 who weigh less than 18 kg (40 lbs.)
- Seat belt or car seat must be used correctly

AHS Car Seat Recommendations (2017) from the AHS YouTube Channel



AHS Car Seat, Booster Seat and Seat Belt Recommendations for Children Under the Age of 13



AHS Recommendations for Car Seat, Booster Seat and Seat Belt Use for Children

Key Messages

- Always refer to the car seat user manual for the maximum weight and height limits of the child's particular car seat, and to the vehicle manual for installation instructions
- A child is safest in their car seat and booster seat until the maximum weight or height limits of their seat according to the manufacturer
- Children under the age of 13 are safest in the back seat

AHS Car Seat, Booster Seat and Seat Belt Recommendations for Children Under the Age of 13

Rear-facing Car Seats

- A rear-facing seat provides the best protection for a child's head, neck and spine in a sudden stop or crash
- A child is safest in a rear-facing car seat until they are at least 2 years old or reach the maximum weight or height limit for the rear-facing seat (as stated by the manufacturer)
- Rear-facing car seats with higher weight and height limits will keep a child in the safer, rear-facing position beyond age 2



AHS Car Seat, Booster Seat and Seat Belt Recommendations for Children Under the Age of 13

Forward-facing Car Seats

- A child who is at least 2 years old or has reached the maximum weight or height limit of the rear-facing seat (as stated by the manufacturer) should ride in a forward-facing car seat
- A child should stay in the forward-facing car seat until they reach the maximum weight or height limit of the seat (as stated by the manufacturer)



AHS Car Seat, Booster Seat and Seat Belt Recommendations for Children Under the Age of 13

Booster Seats

- Once a child has reached the maximum weight or height limit of their forward-facing car seat (as stated by the manufacturer), they should move into a booster seat
- A child is safest in a booster seat until they reach the maximum weight or height limit of the seat (as stated by the manufacturer)



AHS Car Seat, Booster Seat and Seat Belt Recommendations for Children Under the Age of 13

Seat Belts

- A child is ready to ride in the vehicle without a booster seat when the vehicle seat belt fits properly. This is typically when a child is between 8 and 12 years of age. Children can safely use a seat belt when:
 - They are at least 145cm (4 feet 9 inches) tall
 - Their knees bend comfortably at the edge of the seat when sitting all the way back
 - The lap belt stays low and snug across the hip bones
 - The shoulder belt crosses the chest and stays between your child's neck and shoulder
 - They can sit like this for the whole trip without slouching
- Until a child can meet all 5 steps, continue using a booster seat for every ride

Common Safety Errors

- Car seat moves around, does not stay tight
- Shoulder straps loose or twisted
- Top tether strap not used for a forward-facing car seat

Tips for Buying a Car Seat or Booster Seat

- Fits your child
- Fits your vehicle
- Fits your budget




Transport Canada – Car Time Stages

Keep your child in each stage as long as possible

Stage 1 Rear-facing car seats	Use until your child outgrows the car seat's weight/height limits						
Stage 2 Forward-facing car seats		Use until your child outgrows the car seat's weight/height limits					
Stage 3 Booster seats				Use until your child outgrows the booster seat's weight/height limits			
Stage 4 Seat belts							Always use a seat belt
	Birth	10 kg (22 lbs.)	14 kg (30 lbs.)	18 kg (40 lbs.)	30 kg (65 lbs.)	↑	145 cm (4 ft. 9 in.)

Source: Choosing a child car seat or booster seat from Transport Canada

Car Seat Options by Stage

Stage 1 Rear-facing car seats						
Stage 2 Forward-facing car seats						
Stage 3 Booster seats						
	Birth	10 kg (22 lbs.)	14 kg (30 lbs.)	18 kg (40 lbs.)	30 kg (65 lbs.)	45.5 kg (100 lbs.) or more

Buying a Car Seat or Booster Seat – Example

Seat Type	What makes this good?	Things to think about
<p>Rear-facing only, with base (also called Infant)</p> 	<ul style="list-style-type: none">• Has a carry handle. Easy to take out of vehicle, even with baby asleep.• Seat base stays in vehicle. If done up correctly, stays tight for every ride.• May be sold as part of a travel system that includes a stroller.• Some models can be used up to 16 kg (35 lb.) or 81 cm (32 inches).	<ul style="list-style-type: none">• Can only be used rear-facing.• Your baby may outgrow this seat before they are 2 years old.

Examples of Car Seats and Boosters

- Less expensive seats meet same safety standards as higher priced seats
- Many car seats combine stages - can be used for longer



Rear-facing only



Rear-facing/
forward-facing



Rear-facing/
forward-facing/
booster




Forward-facing/
booster






High back
booster

Tips for Buying a Car Seat or Booster Seat

- Look for a label on each car seat and booster seat to see the weight and height limits
-  Helpful resource for comparing seat types

Stage 1: Rear-facing Car Seats

-  Set up your rear-facing seat
-  Install your rear-facing seat with UAS
-  Install your rear-facing seat with the seat belt

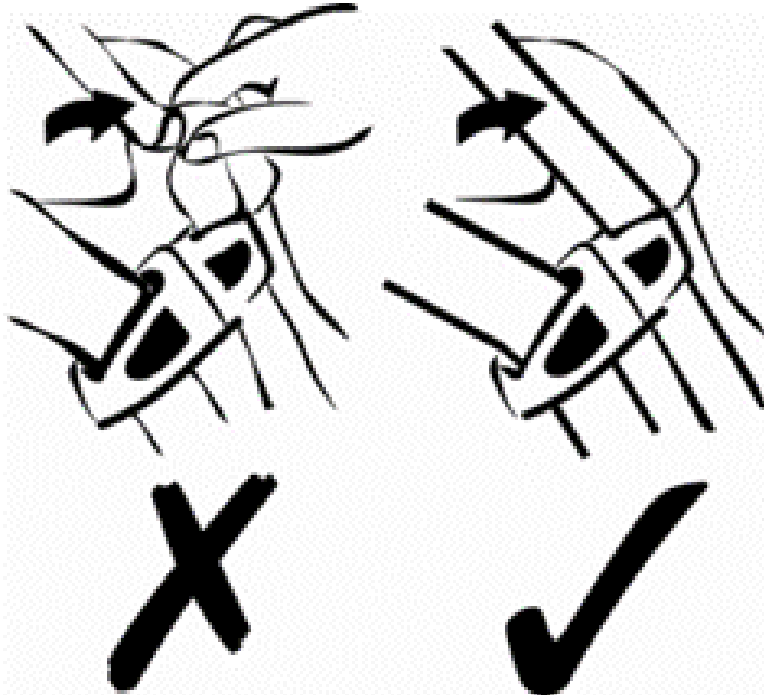
Source: Child Safety Link, an injury prevention program at the IWK Health Centre, Nova Scotia

Tips

- Keep your child rear-facing for as long as possible
- Use a car seat with higher rear-facing limits
- Secure seat with the UAS or the seat belt
- Make sure the harness is snug



Pinch Test



- If you can pinch the strap, it's too loose
- Follow the car seat's instructions to tighten

Examples of Rear-facing Car Seats

Rear-facing only
(infant)



Rear-facing/
forward-facing
(convertible)



Rear-facing/
forward-facing/booster
(3-in-1 and 4-in-1)



Car seats that combine rear-facing with another stage often have higher rear-facing weight and height limits.

Rear-facing Only Car Seat



**Rear-facing only
(infant)**

- May have lower rear-facing weight or height limits – check labels
- Has a carry handle, is easy to take out of the vehicle
- Car seat base stays in vehicle
- Many people find this convenient in first 6+ months of their baby's life

Other Rear-facing Car Seats

- Follow **rear-facing** instructions
- Usually have higher rear-facing weight and height limits
- Larger than rear-facing only seat
- Not easy to move in and out of vehicle



**Rear-facing/
forward-facing
(convertible)**



**Rear-facing/
forward-facing/
booster
(3-in-1 & 4-in-1)**



Car Seat Guidelines in Alberta



Rear-facing

Take the **Car Seat YES Test**

A rear-facing seat provides the best protection for a child's head, neck and back in a sudden stop or crash. Using a car seat properly is required by law in Alberta. Use the YES test to help you properly install the car seat in your vehicle and buckle up your child correctly every time.




Push, pull and adjust the seat until you can check each item that applies to your child's car seat.

Who should be in a rear-facing car seat?

- A child is safest in a rear-facing car seat until they are at least 2 years old or reach the maximum weight or height limit for the rear-facing seat (as stated by the manufacturer).
- Rear-facing car seats that have higher weight and height limits are preferred



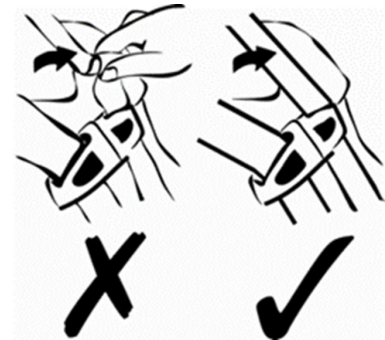
Stage 2: Forward-facing Car Seats

-  Set up your forward-facing seat
-  Install your forward-facing seat with UAS
-  Install your forward-facing seat with the seat belt

Source: Child Safety Link on YouTube

Key Points: Forward-facing Tips

- Use once child is 2 years old or is over limits for a rear-facing car seat
- Secure the seat with the UAS or seat belt
- Always use the top tether strap
- Adjust the harness and keep it snug



Examples of Forward-facing Car Seats



**Rear-facing/
forward-facing
(convertible)**



**Rear-facing/
forward-facing/
booster
(3-in-1 & 4-in-1)**



**Forward-facing/
booster
(harnessed
booster)**

Rear-facing/Forward-facing Car Seats



Rear-facing/
forward-facing
(convertible)



Rear-facing/
forward-facing/
booster
(3-in-1 & 4-in-1)

- Follow the instructions for **forward-facing** use
- Use the top tether
- Some models can be used forward-facing with the 5-point harness up to 30 kg (65 lb.) or 132 cm (52 inches)

Forward-facing/Booster Seats

- Combines forward-facing car seat and booster seat
- Cannot be used rear-facing
- Some models can be used with the 5-point harness up to 30 kg (65 lb.) or 127 cm (50 inches)



**Forward-facing/
booster
(harnessed
booster)**



Car Seat Guidelines in Alberta



Forward-facing

Take the **Car Seat YES Test**

Proper use of a car seat can reduce the chances of your child being injured or killed in a crash by as much as 71%. Using a car seat properly is required by law in Alberta. Use the YES test to help you properly install the car seat in your vehicle and buckle up your child correctly every time.

Push, pull and adjust the seat until you can check each item that applies to your child's car seat.

Who should be in a forward-facing car seat?

- A child who is at least 2 years old or has reached the maximum weight or height limit of the rear-facing seat (as stated by the manufacturer) should ride in a forward-facing car seat.



Stage 3: Booster Seats

 A guide to installing a booster seat

Source: Parachute Canada on YouTube

Key Points

- Use a booster seat after a forward-facing car seat
- Always use a lap-shoulder seat belt with a booster seat
- Make sure the seat belt fits correctly
- Use a booster seat until your child is 145 cm (4 feet 9 inches) tall or reaches the booster seat's limits



Examples of Booster Seats



**Rear-facing/
forward-facing/
booster
(3-in-1 & 4-in-1)
as booster seat**



**Forward-facing/
booster
(with harness
removed)**



**High back
booster**



**Backless
booster**

Booster Seats with Backs



Rear-facing/
forward-facing/
booster
(3-in-1 & 4-in-1)
as booster seat



Forward-facing/
booster
(with harness
removed)



High back
booster

- Offer head/neck protection
- Good for vehicle seats **without** head rests
- Some models can be adjusted as your child grows

Backless Booster Seats

- Cost less than high-back boosters
- Good for vehicle seats **with** head rests
- Some models can be used up to 45 kg (100 lbs.) or 145 cm (57 inches)



Backless booster



Car Seat Guidelines in Alberta



Alberta Health
Services

Booster

Take the **Booster Seat YES Test**

A booster seat provides the best protection for an older child in a sudden stop or crash. An adult seat belt alone doesn't fit a child's body properly. Without a booster seat, an adult seat belt rides too high on a child's belly and neck. This can cause serious injuries to a child in a crash. Use the YES test to help you decide when your child is ready for a booster seat, and to learn how to use one correctly.

Who should be in a booster seat?

- Once a child has reached the maximum forward-facing weight or height limit of their car seat (as stated by the manufacturer), they should move into a booster seat.
- A child is safest in a booster seat until they reach the maximum weight or height limit of the seat (as stated by the manufacturer).

Getting ready

If you check YES to **all** of these points, your child is safest in a booster seat:



Moving to a Seat Belt

5 Step Test: Check all 5 boxes

- ❑ Child is at least 145 cm (4 feet 9 inches) tall
- ❑ Knees bend comfortably at edge of seat
- ❑ Lap belt stays low and snug on hips
- ❑ Shoulder belt crosses middle of chest
- ❑ They can sit like this for the whole trip



For more information

- Contact the car seat manufacturer or your vehicle manufacturer
- Call Health Link at 811
- Visit:
 -  Car Seat Guidelines in Alberta, [MyHealth.Alberta.ca](https://myhealth.alberta.ca)
 -  Motor Vehicle Safety, [Transport Canada](https://www.transportcanada.gc.ca)





Questions?

Provincial Injury Prevention Program

injury.prevention@ahs.ca

