



NATIONAL
**CHILD PASSENGER
SAFETY** BOARD

rear-facing • forward-facing • booster seat • safety belt

Making a Difference in Child Passenger Safety: Fire and Rescue Professionals

It is imperative that fire and rescue professionals know what to look for, how to identify what they see, and what needs to be done anytime they encounter children in a motor vehicle. On average, four children age 14 and younger are killed and over 490 are injured each day in motor vehicle crashes in the United States.¹

Fire and rescue professionals can apply some basic questions to the important issues of increasing the correct use of child seats. These questions will help you identify injuries due to dangerous behaviors and situations and help you decide what corrective actions can be taken.

What can I see? Why is it important?

Regardless of how much or how little Child Passenger Safety training you have taken, there are a number of dangerous behaviors and situations that can be identified anytime you see children in a car:

- Are all children sitting in the back seat? If there are more children than seating positions in the back seat, who is up front and how is that child restrained?
- At a minimum, look for GROSS MISUSE OR NON-USE. Non-use of restraints is the worst type of misuse. Gross misuse may include:
 - No safety belt or LATCH attachments anchoring the child restraint.²
 - No harness securing the child in the child restraint.
 - A rear-facing infant in the front seat with an active passenger air bag.
 - An infant or toddler less than one-year-old facing forward.

There also are some basic questions you can ask yourself to make sure children are properly restrained:

Is there a baby or small child in the car?

Does the child restraint law cover that child? Become more familiar with your state's child passenger safety laws.³ Legal requirements can be an effective "educational" tool in some situations.

Is the child in the right type of child restraint?

NHTSA advises parents and caregivers to keep children in each child restraint type, including rear-facing, forward-facing and booster seats, for as long as possible before moving them up to the next type of seat. More information on car seat recommendations can be found on Page 4.

Is the child restraint facing forward or rearward?

This is determined by the size and age of the child. Infants and toddlers should be kept in rear-facing seats for as long as possible, as the seat is designed to absorb the crash forces.

Can I see a child restraint harness system?

The harness holds the child to the restraint. If it's not used, then there is no restraint. If it's too loose, there's a danger the child could be ejected.

Can I see the vehicle's safety belt? Is it anchoring the child restraint?

A child restraint that's not anchored to the car is dangerous to the child and other passengers. The car's safety belt or LATCH system should be routed correctly and tightened down to reduce movement of the child restraint. There should be no more than one inch of movement forward-and-back or side-to-side regardless of which system is used.

Is there a child using a safety belt who is too small to use it properly?

A child should remain in a booster seat until he or she is big enough to fit in a seat belt properly. For a seat belt to fit properly, 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.

Vehicle Collisions Involving Children

In an ideal world, we would be able to prevent crash-related injuries by preventing the crashes from happening in the first place. Unfortunately, this is not the case. Crashes will occur, and occupants will be injured. Fire and rescue professionals need to be aware of ways that restraint use, non-use and misuse can affect injuries and incorporate relevant questions about restraint use into their routine procedures:

- In which seating position in the vehicle was the child?
- Was the child in a child seat?
- Was the child restraint held in the vehicle by the seat belt or LATCH system?
- Was the child secured in the seat by a harness?
- Was there intrusion into the vehicle where the child was sitting?
- Was the child in an air bag position with the air bag deployed?

The answers to these questions may provide clues about potential injuries that may not otherwise be easily observed. Specific forms of misuse may lead directly to specific types of injuries, such as: if the child restraint was not secured tightly in the vehicle, he or she may have been partly ejected. Or if a seat belt was used incorrectly on a child, there may be serious hidden injuries to the child in the abdomen or spinal cord areas.

In addition, if a child is injured, first responders need to follow state or local protocols for transporting the injured child. Usually, this means leaving the child in the restraint to administer care and often transporting the child in the child restraint.

It is recommended that child safety seats be replaced following a moderate or severe crash to ensure a high level of protection for child passengers. A child safety seat does not need to be replaced if the vehicle was able to be driven away from the crash, the door nearest the safety seat was undamaged, there were no injuries to any of the occupants, the airbags did not deploy, AND there is no damage to the safety seat. ■

What should I do?

Fire and rescue professionals need to know what to look for, how to identify what they see, and what needs to be done anytime they encounter children in a motor vehicle. They also need to be aware that the non-use or misuse of occupant restraint systems can have an effect on injuries sustained in motor vehicle crashes and possible treatment options in order to know what to look for at a crash scene to possibly aid in treatment.

If a fire and rescue professional sees a child in a vehicle during the course of daily activities, he or she should look for the gross misuse or non-use of child restraints. If the opportunity presents itself and gross misuse or non-use is observed, then you should take appropriate action to protect the child. You can educate the driver about proper use or direct them to an inspection station and warn the parent or caregiver about the potential of serious injury or death to the child.⁴

Interaction with neighborhoods and city/county districts has always been a part of the fire and rescue professional community. There are a number of ways you can help educate the public about child passenger safety:

- Child passenger safety information fairs
- Car seat check-up clinics
- Permanent child restraint inspection stations

As first responders to crash scenes, fire and rescue professionals are uniquely qualified to act as spokespersons to their community about the importance of child passenger safety.

Also, the most effective enforcement of occupant restraint laws is done with community support, and enforcement agencies are more likely to actively enforce child passenger safety and seat belt laws if the public demands and supports it. Expressions of support from fire and rescue professionals to local government and enforcement officials can go a long way toward helping to assure that these laws are actively enforced. ■

True/False Quiz

1. As first responders to crash scenes, fire and rescue professionals are uniquely qualified to act as spokespersons to their community about the importance of child passenger safety. **TRUE** or **FALSE**
2. Non-use of restraints is the worst type of misuse. **TRUE** or **FALSE**
3. Infant seats should face forward. **TRUE** or **FALSE**
4. Children should usually be taken out of the restraint to administer care or transport them. **TRUE** or **FALSE**
5. At a minimum, you should look for gross misuse or non-use of child restraints. **TRUE** or **FALSE**

Answer Key: 1. True; 2. True; 3. False; 4. False; 5. True

Car Seat Recommendations for Children



- Select a car seat based on your child's age and size, and choose a seat that fits in your vehicle and use it every time.
- Always refer to your specific car seat manufacturer's instructions; read the vehicle owner's manual on how to install the car seat using the seat belt or LATCH system; and check height and weight limits.
- To maximize safety, keep your child in the car seat for as long as possible, as long as the child fits within the manufacturer's height and weight requirements.
- Keep your child in the back seat at least through age 12.

AGE



Birth – 12 months

Your child under age 1 should always ride in a rear-facing car seat. There are different types of rear-facing car seats: Infant-only seats can only be used rear-facing. Convertible and 3-in-1 car seats typically have higher height and weight limits for the rear-facing position, allowing you to keep your child rear-facing for a longer period of time.



1 – 3 years

Keep your child rear-facing as long as possible. It's the best way to keep him or her safe. Your child should remain in a rear-facing car seat until he or she reaches the top height or weight limit allowed by your car seat's manufacturer. Once your child outgrows the rear-facing car seat, your child is ready to travel in a forward-facing car seat with a harness.



4 – 7 years

Keep your child in a forward-facing car seat with a harness until he or she reaches the top height or weight limit allowed by your car seat's manufacturer. Once your child outgrows the forward-facing car seat with a harness, it's time to travel in a booster seat, but still in the back seat.



8 – 12 years

Keep your child in a booster seat until he or she is big enough to fit in a seat belt properly. For a seat belt to fit properly 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. Remember: your child should still ride in the back seat because it's safer there.

DESCRIPTION (RESTRAINT TYPE)



A **REAR-FACING CAR SEAT** is the best seat for your young child to use. It has a harness and in a crash, cradles and moves with your child to reduce the stress to the child's fragile neck and spinal cord.



A **FORWARD-FACING CAR SEAT** has a harness and tether that limits your child's forward movement during a crash.



A **BOOSTER SEAT** positions the seat belt so that it fits properly over the stronger parts of your child's body.



A **SEAT BELT** should lie across the upper thighs and be snug across the shoulder and chest to restrain the child safely in a crash. It should not rest on the stomach area or across the neck.



www.facebook.com/childpassengersafety



<http://twitter.com/childseatsafety>

March 21, 2011

Additional Information and References

- National Highway Traffic Safety Administration. 2009 Children Traffic Safety Fact Sheet. Available at: <http://www-nrd.nhtsa.dot.gov/Pubs/811387.pdf>
- For more information on LATCH, visit <http://www.nhtsa.gov/Safety/LATCH>
- To find your state's laws, visit http://www.ghsa.org/html/stateinfo/laws/childsafety_laws.html
- To find your nearest inspection station, visit <http://www.nhtsa.gov/cps/cpsfitting/index.cfm>