Trooper Rocky Gripton is an Idaho State Police Officer. He has been in law enforcement for $101 / 2$ years. Besides Trooper Gripton's routine patrol duties, he serves as a crash reconstructionist and child safety seat expert. Over the years Trooper Gripton has investigated hundreds of serious injury and fatality crashes. Most of the serious injury and fatality crashes he has investigated have been solely related to non-seat belt use or improper use of seat belts for adults. All of the serious injury and fatality crashes involving children have been solely related to children being unrestrained or improperly restrained. Trooper Gripton has seen some horrific crashes where children have been uninjured due to proper child safety seat use. There is currently an 80 percent average of improper child safety seat use across the nation. Please take the time to make sure your children are properly secured in your vehicle and you're properly wearing your seat belt. It could save you or your child's life.

## Things to remember:

- Get a tight fit between the child restraint system and the vehicle seat. Put your weight into the child restraint system to compress the vehicle seat while tightening the seat belt as much as possible. If your trying to install the child safety seat yourself, put your knee in the child seat to help compress the seat. Two people installing a child safety seat works best, one to push the seat down and the other person to tighten the seat belt. The base of the child safety seat should not move side to side more than one inch.
- Read your vehicle owners manual and the child safety seat manual before installing the safety seat. Seat belts are not the same in all vehicle makes and models. Newer seat belt systems have a built-in locking mechanism. Some vehicle seat belt systems require additional hardware, such as a locking clip, to lock the child restraint during normal driving conditions. With some vehicle seat belt systems you may need a locking clip to secure the seat belt. If you purchased your child safety seat new, a locking clip will be attached in the rear of the safety seat. Look on your seat belt for an attached warning label regarding child safety seats.
- Some children require special child restraints. Premature infants, children with respiratory difficulties, orthopedic challenges, and neurological and behavioral problems may require special child restraints.
- Always use the correct child restraint system. Never use pillows, books or towels to boost a child. Doing so can compromise your childs safety.
- A child should remain in some type of booster seat until 8 years of age, at least 80 pounds, and reach a height of 4 feet 9 inches before their ready for adult safety belts. They can move to a safety belt when they can place their back firmly against the vehicle seat back cushion with their knees bent over the vehicle seat cushion. The lap belt must fit low and tight across the child's upper thighs. The shoulder belt should rest over the shoulder and across the chest. Never put the shoulder belt under the arm or behind the child's back.
- The child should remain in the rear seat until over 12 years of age due to passenger side air bags.


## Things to Avoid:

- Infant carriers without the attached base are not designed to protect infants in a crash. They do not have a belt path or a label stating they meet federal motor vehicle safety standards.
- The "Child Crusher" position. Never take your child out of a child safety seat for any reason while the vehicle is still moving. I have personally seen children as young as 8 months old lose their lives in vehicle crashes when the parent or guardian took the child out of a safety seat while the vehicle is still in motion and a crash occurred. A lap-held, unrestrained child is in the "child crusher" position.
- A child should never be unrestrained in any vehicle seat, with or without the air bag system.
- Never place a child in the front seat with the air bag activated until the child is 12 years of age or older, or properly fits the vehicles seat belts.


## Rear-Facing Infant Seats:

- A child should be secured in the rear seat and be rear-facing until the age of 1 year and 20 pounds.
- A harness chest clip should be positioned at the child's mid-chest or armpit level. This keeps the shoulder straps in the correct position.
- Harness straps should be at, or slightly below, the child's shoulders.
- Harness straps should be snug and tight. Check for tightness at the shoulders.
- A child should be sitting at a 45 degree angle (Check the safety seat manufacture's recommendation for the correct angle. An infant sitting too upright can cause a child's head to drop forward, cutting off his/her airway. Some safety seat manufacturers attach a level on the seat, indicating 45 degrees. Depending on your child safety seat and your vehicle seat, a tightly rolled towel or a foam noodle at the crack of the vehicle seat helps position the infant seat at the correct 45 -degree angle. Rarely, does a rear facing child safety seat fit properly in a vehicle, at the 45-degree angle, without the aid of a tightly rolled towel or a foam noodle.
- Children should never be wrapped up in a blanket, thick coat or other bulky garments before being strapped into a restraint system. Instead, place blankets over the internal harness straps.
- After market products have forced the chest clip to ride too low on the child's abdomen and are not recommended. These after market products have not been crash tested.
- Twisted, loose harness straps compromise protections. Harness straps should be straight and flat.
- Harness straps should be washed periodically. After washing they should be laid straight and flat to dry. Proper drying will assist in keeping straps from twisting.
- Rear facing infant seats only, should never be placed in a forward-facing position. Babies should ride rear-facing until at least one year of age, and at least 20 pounds.
- If your seat has a carrying handle it should always be in the down position while in the vehicle.


## Rear-Facing Convertible Seats:

- Convertible seats are seats that can be used in the rear-facing position or forwardfacing position. Remember children have to be rear-facing until one year of age and at least 20 pounds.
- Harness straps on rear-facing seats should be positioned at, or slightly below, the child's shoulders.
- Harness chest clips are at armpit level.
- Harness straps are snug and tight.
- Child restraint is positioned at approximately a 45-degree angle for rear-facing.
- If you have a seat that has a shield make sure you read the child safety seat instruction manual for proper adjustment. Make sure child's head will not come into contact with the shield in a collision.
- Make sure you use the correct seat belt path. The seat belt path is different for the rear-facing position vs. the forward-facing position.


## Forward-Facing Convertible Seats:

- Harness straps on forward-facing restraints should be positioned at, or slightly above, the child's shoulders.
- Harness straps are snug and tight
- Harness chest clip is positioned at the child's mid-chest or armpit area.
- Children should remain in a forward facing child restraint until they are approximately 40 pounds and 4 years of age.


## Forward-Facing Seats:

- Forward-Facing Seats are also known as "high back boosters," or "combination seats."
- Combination seats convert from a 5-point harness system to a belt-positioning booster seat.
- At 40 pounds, harness straps should be removed and child should use the vehicle lap/shoulder belt.
- Some combination seats may be used without harness straps up to 60-100 pounds.


## Belt-Positioning Booster Seats:

- No-back booster seats are used to correctly position the child in a vehicle lap/shoulder belt.
- Booster seats correctly position the lap belt across the child's upper thighs and the shoulder belt across the chest.
- High-back and no-back booster seats are for children who have outgrown child safety seats, at 40 pounds, and are not large enough for the vehicle belt system.
- Children should use a belt positioning booster seat until they are at least 8 years old and 80 pounds, or are over $4^{\prime} 9^{\prime \prime}$ tall.
- Always use the lap/shoulder belt combination with a no-back or other beltpositioning booster seat. Never use a lap belt only.


## Seat Belt Systems:

- Children should sit straight against the seat back.
- The lap belt should fit snug and low over the upper thighs. If it rides up on the abdomen, it could cause serious injuries in a crash.
- Never allow a child to place a shoulder belt behind his/her back. Running the shoulder belt under a child's arm can cause life-threatening injuries in a crash.


## Latch \& Tether Systems:

- By September 2002, all new vehicles and most child safety seats will be equipped with the Latch attachments
- Read your vehicle owners manual regarding your Latch and Tether system.
- Upper tether attachment improves protection by attaching the top of the child safety seat more securely to the vehicle. Older model vehicles may require special hardware installation. See your local vehicle dealer to see if a tether system can be installed.
- Lower anchor attachments make installation easier by allowing the child restraint to be attached to the vehicle without using the vehicle's belt system.

For more information look at the NHTSA website at www.NHTSA.dot.gov/people/injury or the Idaho Department of Transportation - Office of Highway Safety website at http://www.itd.idaho.gov/highways/ohs/ChildSafety/index.html You can also email Sue Coombs at Southwest District Health at scoombs@phd3.state.id.us, or email Trooper Rocky Gripton rocky.gripton@isp.state.id.us

