

# Seatbelts

## Seatbelt wearing rate in British Columbia

Transport Canada, the federal government agency responsible for ensuring safer transportation for Canadians, conducted observational surveys of seatbelt use in urban areas in 2005 and rural areas in 2006.

Survey results for British Columbia showed:

- 91.7 per cent of passenger car drivers and light truck occupants in BC are buckling up.
- Seatbelt wearing rates are lower in rural areas.
- Males under 25 years have the lowest wearing rates.
- Women have higher wearing rates than men.

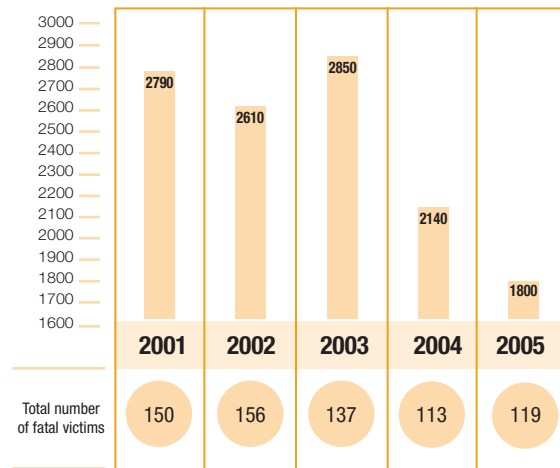
## “Did you know?”

**Seatbelt systems** are the single most important protective mechanism available to adult vehicle occupants, according to the U.S.-based National Highway Traffic Safety Administration (NHTSA). They reduce the risk of occupants striking the interior of the vehicle, colliding with other passengers, or being ejected.

**NHTSA statistics** show that the correct use of lap/shoulder belts reduce the risk of death to front seat occupants by 45 per cent and the risk of moderate-to-critical injury by 50 per cent. For light truck occupants, seatbelts reduce the risk of death by 60 per cent and moderate-to-critical injury by 65 per cent.

**Drivers** who are buckled up have five times the risk of dying in a crash if their rear seat passengers are not Clicking In, according to a Japanese research paper. The 2002 research shows that injuries to the driver and front seat passenger are caused when the people in the back who are not buckled up catapult to the front.

## Victims killed and injured where no restraint was identified



■ Total number of injured victims

2005 fatality count is not fixed. Fatality data continues to settle over time.

The conclusion: 80 per cent of the deaths from these kind of crashes could have been eliminated if the rear seat occupants had been buckled up.

**Each year in Canada**, Transport Canada statistics show that approximately 1,000 people are killed and approximately 3,400 are seriously injured because they did not use an occupant restraint device.

**Transport Canada** estimates that if all drivers and passengers always wore their seatbelt, an estimated 300 lives would be saved annually in Canada.

**ICBC statistics** — based on police-reported crash incidents between 2001 and 2005, approximately 2,440 victims were injured and 135 victims were killed yearly in BC where no restraint\* was identified.

\* Comprises seatbelt, lap belt, infant and child restraint system and booster seats.

## How seatbelts hold you in place

On impact or during emergency braking, the seatbelt retractors lock-up so the belt system holds you in place. If you have an air bag-equipped vehicle, your belt system keeps you out of the deployment zone if you are buckled up correctly. Check ICBC's air bag fact sheet or [www.icbc.com](http://www.icbc.com) for deployment zone information.

## Good belt fit

"Good belt fit" means positioning the seatbelt system so that the force of impact during a crash will be distributed over the bony structures of the pelvis and chest. Poor belt fit is when the lap belt is placed over the soft abdomen area or when the shoulder belt is under the arm or behind the back or when loose.

"Good belt fit" gives protection during a crash.

## Seatbelt pretensioner system

A pretensioner system provides added protection in a crash by tightening the seatbelt during an impact. This safety system is available on most new vehicles.

## Unrestrained occupants

According to Transport Canada research, an unbuckled 68 kg adult involved in a 50 km/h frontal crash with a stationary object will strike other occupants, the interior of the vehicle or be ejected with the equivalent force of a 3.5 ton truck. An unrestrained 11 kg child in a similar crash can be thrown forward with the force of a 544 kg baby elephant.

For more information on vehicle safety, check out Transport Canada's website at [www.tc.gc.ca](http://www.tc.gc.ca) or [www.icbc.com](http://www.icbc.com)

## Seatbelt tips

- Wear a lap/shoulder belt system when available. Position the lap belt low over the pelvic bones (hips) and the shoulder belt over the shoulder and across the chest. Never place the shoulder belt under the arm or behind the back. It's dangerous.
- Never recline your seat while wearing a seatbelt in a moving vehicle.
- Remove all slack from the lap and shoulder belt.
- Never place a rear-facing infant restraint in a passenger seat that has an active air bag.
- Never carry a child in your arms while riding in a motor vehicle. You cannot protect them during a crash.
- Buckle up all children, 12 and younger, in the back seat in an age/weight appropriate restraint system. This is the safest location in the majority of crashes.
- When your child outgrows the forward-facing restraint at approximately 4<sup>1</sup>/<sub>2</sub> years of age, switch to a booster seat. The booster raises the child so the lap belt fits over the pelvic bones (not across the stomach) and the shoulder belt fits properly across the child's chest.
- Older children are ready to use an adult seatbelt system at 145 cm or approximately nine years of age.
- Never restrain two children in one seatbelt. The forces of a frontal crash will throw them violently together as their bodies attempt to occupy the same space.
- Aftermarket seatbelt adjusters that change the path of the shoulder belt can be unsafe and should not be used. Should an adjuster be necessary, choose one that does not affect the path of the seatbelt or the seatbelt's ability to retract.
- During pregnancy, women should wear the lap belt snug and low over the pelvic bones (below the baby) and the shoulder belt snug against the chest. The baby will be safer if the mother is protected in a crash.
- Read your vehicle manual and child restraint instructions for additional seatbelt and child restraint information.

### British Columbia seatbelt law

Seatbelt use has been mandatory in B.C. since 1977.

- MVA S.220 Motor Vehicle Act (“MVA”) (1) A seatbelt assembly includes a pelvic restraint, an upper torso restraint or both.
- MVA S.220 Motor Vehicle Act (“MVA”) (2) A person must not sell or operate a motor vehicle unless it is equipped with at least two seatbelt assemblies in the front seat.
- MVA S.220 Motor Vehicle Act (“MVA”) (3) A person must not operate a motor vehicle that has had the seatbelts removed or rendered inoperative.
- MVA S.220 Motor Vehicle Act (“MVA”) (4) A seatbelt assembly must be worn when a motor vehicle is being operated.
- MVA S.220 Motor Vehicle Act (“MVA”) (6) Drivers must ensure that passengers, who have attained six years of age but are under 16 years of age, are properly restrained.



As of May 14, 2007, amendments to the Motor Vehicle Act and the Offence Act regulations have raised the fine amount to \$167 — including the 15 per cent victim surcharge. The amount can be reduced by \$25 if the ticket is paid within 30 days.

*This publication reflects the laws in British Columbia as of May 2007. You should be aware that laws might change from time to time, so for a current statement of the law, you should refer to the applicable legislation. In the case of any conflict between this publication and the legislation, you should always follow the legislation.*

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