



SCHOOL BUS SAFETY

THE SEAT BELT ISSUE

Every school day, millions of Canadian children travel by school buses. Considering the exposure and the low number of incidents involving school buses, they are known to be the safest mode of ground transportation.

Safety around school buses is an integral part of pupil transportation services. It is a daily motto for everyone involved in this industry.

Despite an excellent safety record, parents naturally have questions related to the safety of their children, including why there are no seat belts on school buses.

What makes a school bus different from other motor vehicles?

School buses have been specifically designed and equipped to carry students. These vehicles are built with unique safety considerations developed under CSA standards: the D250 standards.

Considering the size of a school bus, students are protected by a lower impact zone. They are designed so students sit above the impact zone where an automobile would typically hit a school bus.

What is done to protect students when they are entering or exiting a bus?

It is a known fact that students outside a bus are more likely to suffer serious or fatal injuries when struck by the school bus or other vehicles.

It is with this in mind that some safety measures were taken in New Brunswick. All new school buses must meet CSA-D250 standards. In 1995, STOP side arms were installed on all school buses and, since 1999 a CROSSING ARM is mounted on the front bumper of all school buses forcing students to walk at least three metres away from the bus while crossing in front of it. This provides the driver with a clear view of students crossing in front of the stopped bus.

A provincial training program is mandatory for every new bus driver and an annual refresher course is provided to all regular drivers. Instruction and safety rules around school buses are provided to all students on a yearly basis.



Have seat belts been considered?

Yes. Over the years, Transport Canada has conducted research and simulated crash tests with school buses. The purpose was to evaluate and measure the crash forces and the movement of passengers to determine the probable severity of injuries in the event of an accident. While the findings were not conclusive, they have noted that, in some situations, seat belts could actually negatively affect the safety of children on school buses. For example, the installation of a lap belt or a two-point restraint system can introduce potential hazards, such as neck and facial injury. With the restraint at the hip, the head and the face, and not the whole body, would absorb the impact and increase the likelihood of neck and facial injuries. The present school bus design is not intended and not equipped to receive the three-point seat belt, which has the shoulder as the third point restraint. Information on studies carried out by Transport Canada can be obtained on their web site:

http://www.tc.gc.ca/roadsafety/bus/schoolbus/BUSSELT_e.HTM

The National Highway Traffic Safety Administration (NHTSA), the body responsible for establishing federal motor vehicle safety standards in the United States, issued a position statement on seat belts. It said, “*there is insufficient reason for a federal mandate for seat belts on large school buses.*” It goes further by saying that “*school bus transportation is one of the safest forms of transportation in the United States.*”

Additional information on the NHTSA can be obtain on their web site:



http://www.stnonline.com/stn/occupantrestraint/tableofcontents/sb_nbspaper.htm

Why is the present school bus design considered the safest possible?

School buses have a passive crash protection system. Seat backing is high, wide and thick, windows are small to prevent students from being thrown from buses and all metal surfaces are covered with foam padding. This allows the seats to absorb the energy of an impact if a child is thrown against the padded back, creating an effect known as **compartmentalization**. This concept of compartmentalization has been incorporated into the manufacturing of school buses for years and has been determined to be safer than any other form of restraint device currently available. It allows for a better distribution of energy in the event of an impact.

School buses are required to have increased body strength by the provision of horizontal full length impact rails located at the shoulder, cushion, floor levels and lower skirt levels. The mirror system in front and on both side of the bus is designed to help drivers see pedestrians close to the vehicle and the specified field of view.

Do other jurisdictions have seat belts on school buses?

No Canadian jurisdiction requires seat belts on buses based on the evidence currently available.

Are seat belts not used due to the costs involved?

The installation of seat belts in school buses is not a financial issue. If seat belts were deemed safer, they would be used. Unless or until that is shown to be the case, the decision must be based on **data and science** and not on **emotion and supposition**.

What can we expect in the future?

Transport Canada, in co-operation with their NHTSA colleagues in the United States, is researching and testing what they call the “next generation” of passenger crash protection devices. In other words, it is possible, that different types of belts or child restraints could be used as a restraint device on school buses.

The Province of New Brunswick, like all other provincial jurisdictions, is keeping up to date on any new developments in this area.

