

Fact Sheet TP 2436E

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TRANSPORT CANADA'S SURVEYS OF SEAT BELT USE IN CANADA 2004-2005

BACKGROUND

The National Occupant Restraint Program (NORP) is an important element of *Road Safety Vision 2010* – an ambitious partnership approved by the federal, provincial and territorial ministers responsible for transportation and highway safety to make Canada's roads the safest in the world. The objective of NORP is to achieve a minimum rate of 95% in seat belt usage and in the proper use of child restraints by all motor vehicle occupants by 2010. Part of Transport Canada's contribution to this program is to conduct observational surveys of seat belt use. In September 2004, Transport Canada conducted an observational survey of seat belt use in rural communities across Canada. In September 2005, the same survey was conducted in urban communities

METHOD

The September 2004 and September 2005 surveys measured the seat belt usage rate separately in rural Canada and urban Canada. Rural Canada was defined as towns with a population of less than 10,000 but more than 1,000 that are located outside any census metropolitan area, as defined by Statistics Canada's 2001 national census. Urban Canada was defined as communities with a population over 10,000, plus those communities with a population of less than 10,000 that are located within a census metropolitan area.

The rural survey targeted all the occupants of light duty vehicles including passenger cars, pickup trucks, minivans and sport utility vehicles (SUVs). The survey occurred over the week of September 22 to September 28, 2004, and involved 252 sites. Each observation period was two hours long and took place during daylight hours (between 6:30 a.m. and 7:30 p.m.). A total of 39,769 vehicles and 58,743 occupants were observed during the course of the study.

The urban survey targeted all occupants of light duty vehicles including passenger cars, pickup trucks, minivans and SUVs. This survey, which was conducted over the week of September 15 to September 21, 2005, involved two separate observation periods at each of 263 sites. Each observation period was one hour long and took place during daylight hours (between 6:30 a.m. and 7:30 p.m.). A total of 84,129 vehicles and 118,226 occupants were observed during the course of the study.

Therefore, during the two surveys, a total of 123,898 vehicles and 176,969 occupants were observed at 515 sites across Canada.



HIGHLIGHTS

- In Canada, 90.5% (± 0.2%) of occupants of light-duty vehicles buckle up. In urban communities, an estimated 91.1% (± 0.2%) of all occupants, while an estimated 86.9% (± 0.7%) of all occupants of light-duty vehicles in rural communities use seat belts. The national seat belt usage rate measured in the 2004-2005 surveys is is about 4 percentage points higher than that measured in the 2002-2003 surveys.
- The rate of seat belt usage in Canada is much lower among occupants of pickup trucks (84.8%) than among occupants of passenger cars (91.9%) and minivans and SUVs (91.9%). Specifically looking at drivers, the rates were 92.4% for passenger cars, 91.9% for minivans and SUVs, and 85.5% for pickup trucks. Similar trends were evident in both the rural and urban communities of the country.
- A higher percentage of female drivers wore seat belts (93.9%) than male drivers (89.8%) in Canada. The higher rate of seat belt usage by females was consistent across all three vehicle types and all provinces and territories.
- The proportion of drivers wearing seat belts tends to increase with the driver's age group, but this finding is not consistent across all jurisdictions. In Canada as a whole, the proportion ranges from 87.0% of those under 25, to 91.8% of those 25 to 49 and 92.1% of those 50 and older.
- The rate of seat belt usage in Canada is lower among the back seat occupants (84.9%) than among the front seat occupants (90.5%). The higher rate of seat belt use by front seat occupant is generally consistent across all jurisdictions with a few exceptions.

DETAILED RESULTS

Seat Belt Usage for All Occupants by Province or Territory

Chart 1 shows that in rural communities, an estimated 86.9% (± 0.7%) of all occupants of light-duty vehicles use seat belts. Jurisdictions at or above the national average were Quebec, Ontario, Manitoba and Saskatchewan. Those below the national average were Newfoundland and Labrador, Prince Edward Island, Nova Scotia, New Brunswick, Alberta, British Columbia, and two of the three territories. The seat belt usage rates were not measured in Nunavut in 2004.

N.L. 84.8% P.E.I. 65.8% N.S. 83.4% N.B. 85.6% Que. 89.1% Province/Territory Ont. 87.9% Man. 90.3% 87.6% Sask. Alta. 82.4% B.C. 86.0% Y.T. 66.3% N.W.T. 64.8% Nu. Canada 86.9% 0% 10% 20% 30% 40% 60% 80% 50% 70% 90% 100%

Chart 1
Rural Canada Seat Belt Use by Province or Territory - 2004

Comparison of the rural survey results for 2002 and 2004

• The 2002 rural seat belt survey gathered data only on **front seat occupants** while the 2004 survey gathered data on **all occupants**.

Percentage of all Occupants Using Seat Belts

- In Canada, an estimated 85% of front seat occupants of light duty vehicles in rural communities used seatbelts in 2002 and this increased in 2004 to an estimated 87.1%.
- The 2004 survey comprised communities spread out in 69 geographical regions, while the 2002 survey included only 63 regions.

- Communities that have a population over 10,000 but are not classified as census agglomerations have been included in the 2004 survey.
- Some population strata have been combined.

Chart 2 shows that in urban communities, an estimated 91.1% ($\pm 0.2\%$) of **all occupants** of light-duty vehicles use seat belts. Jurisdictions at or above the national average were Nova Scotia Quebec, Ontario, Manitoba, Saskatchewan and British Columbia.

N.L. 88.0% P.E.I. 86.0% N.S. 91.4% 86.0% N.B. Que. 91.1% Province/Territory Ont. 92.6% 92.4% Man. Sask. 94.7% Alta. 83.0% B.C. 91.9% Y.T. 87.9% N.W.T. 79.1% Canada 91.1%

Chart 2
Urban Canada Seat Belt Use by Province or Territory - 2005

Percentage of All Occupants Using Seat Belts

85%

90%

Comparison of the urban survey results for 2003 and 2005

80%

75%

70%

- Both the 2003 and the 2005 urban seat belt survey gathered data for **all occupants**.
- In Canada, an estimated 87.2% of all occupants of light duty vehicles in urban communities used seatbelts in 2003 and this increased in 2005 to an estimated 91.1%, almost 4 % higher. In 2003, an estimated 87.6% of front seat occupants in urban communities were seatbelts and this increased to in 2005 to 91.3%.
- The 2005 survey comprised communities spread out in 67 geographical regions, while the 2003 survey included 60 regions.
- Communities that have a population over 10,000 but are not classified as census agglomerations have been excluded in the 2005 survey (they were included in the 2004 survey instead).
- Some population strata have been combined.

100%

95%

Chart 3 shows that an estimated 90.5% ($\pm 0.2\%$) of **all occupants** of light-duty vehicles in Canada use seat belts. The jurisdictions at or above the national average in 2004-2005 were Quebec, Ontario, Manitoba, Saskatchewan and British Columbia. The seat belt usage rates were not measured in Nunavut in 2004.

87.0% N.L. P.E.I. 81.4% N.S. 88.7% N.B. 85.9% Que. 90.9% Province/Territory Ont. 92.1% Man. 92.1% Sask. 93.7% Alta. 82.9% B.C. 91.6% Y.T. 81.5% N.W.T. 75.1% Nu. Canada 90.5% 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% Percentage of All Occupants Using Seat Belts

Chart 3
Canada Seat Belt Use by Province or Territory, 2004-2005

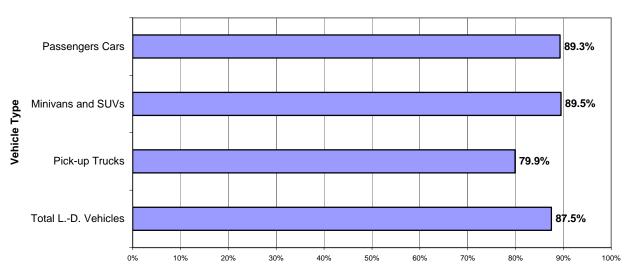
Comparison of the national survey results for 2002-2003 and 2004-2005

- The 2002-2003 seat belt survey reported data on **front seat occupants** only while the 2004-2005 survey reported data on **all occupants**.
- In Canada, the 2002-2003 seat belt survey reported an estimated 87.4% of front seat occupants of light duty vehicles used seatbelts and this increased in the 2004-2005 seat belt survey to an estimated 90.8% of front seat occupants of light duty vehicles..
- The 2005 survey comprised communities spread out in 69 geographical regions, while the 2003 survey included 63 regions.
- The stratification of the two surveys differs. The 2004-2005 survey is stratified by geographic regions as well as population size groupings. Whereas the 2002-2003 survey is stratified by population size groupings only.

Seat Belt Usage by Light-Duty Vehicle Type

Chart 4 shows that in rural communities, the rate of seat belt usage is much lower among **all occupants** of pickup trucks (79.9%) than of passenger cars (89.3%) and minivans and SUVs (also 89.5%). For drivers specifically, the rates were 90.1% for passenger cars, 89.8% for minivans and SUVs and 80.7% for pickup trucks.

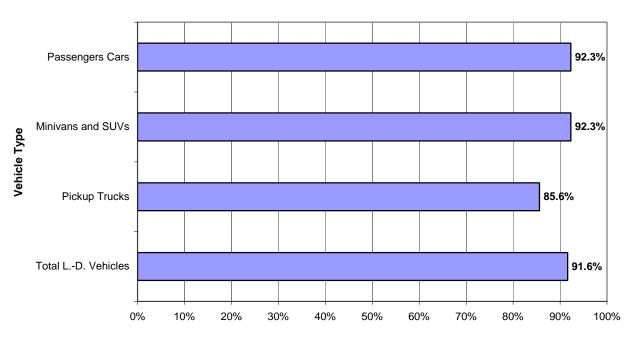
Chart 4
Rural Canada Seat Belt Use by Light-Duty Vehicle Type - 2004



Percentage of All Occupants Using Seat Belts

Chart 5 shows that in urban Canada, the rate of seat belt usage is much lower among **all occupants** of pickup trucks (85.6%) than of passenger cars (92.3%) and minivans and SUVs (92.3%). For drivers specifically, the rates were 92.8% for passenger cars, 92.2% for minivans and SUVs and 86.2% for pickup trucks.

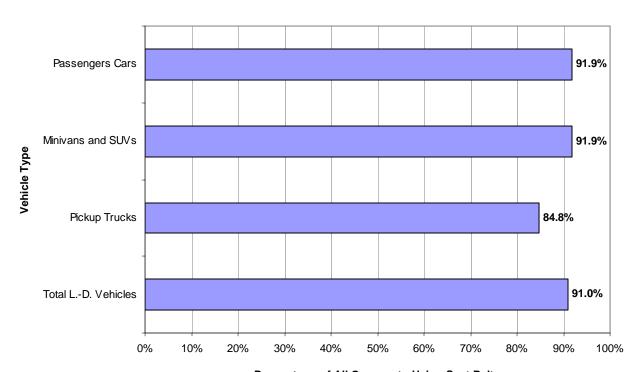
Chart 5
Urban Canada Seat Belt Use by Light-Duty Vehicle Type - 2005



Percentage of all Occupants Using Seat Belts

Chart 6 shows that in Canada, the rate of seat belt usage is much lower among **all occupants** of pickup trucks (84.8%) than among those of passenger cars (91.9%) and minivans and SUVs (91.9%). For drivers specifically, the rates were 92.4% for passenger cars, 91.9% for minivans and SUVs and 85.5% for pickup trucks.

Chart 6
Canada Seat Belt Use by Light-Duty Vehicle Type - 2004-2005



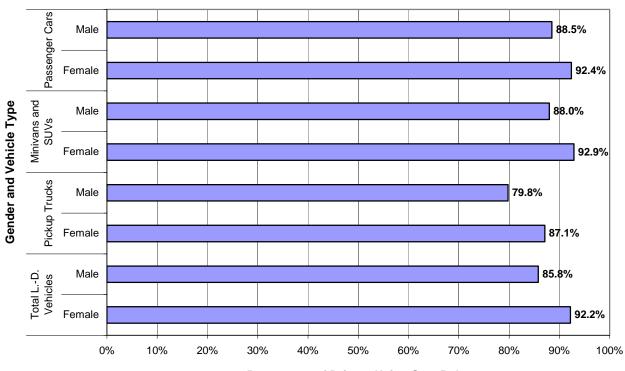
Percentage of All Occupants Using Seat Belts

Seat Belt Usage by Gender of Driver and Vehicle Type

Chart 7 shows a higher percentage of female drivers wearing seat belts (92.2%) than male drivers (85.8%) in rural communities.

- The higher rate of seat belt usage by females was consistent across all three vehicle types.
- Other data from the survey show that the higher rate of seat belt usage by females is generally consistent across all provinces and territories, except in the Yukon where it is 64.9% for females and 65.9% for males. Other differences range from 5.1 percentage points in British Columbia (92.6% for females vs. 87.5% for males) to 26.7 points in Prince Edward Island (85.7% for females vs. 59.0% for males).

Chart 7
Rural Seat Belt Use by Gender of Driver and Vehicle Type - 2004

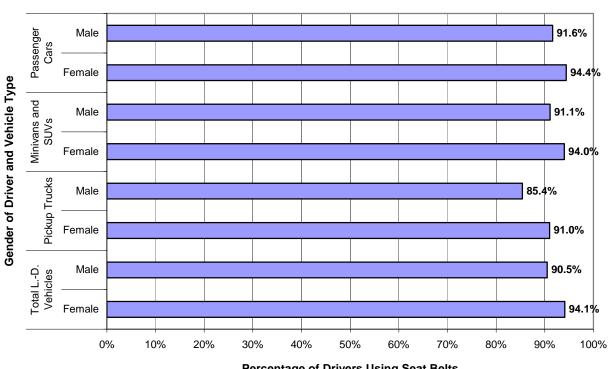


Percentage of Drivers Using Seat Belts

Chart 8 shows a higher percentage of female drivers wearing seat belts (94.1%) than male drivers (90.5%) in urban communities.

- The higher rate of seat belt usage by females was evident for all types of vehicles.
- Other data from the survey show that the higher rate of seat belt usage by females in urban communities is consistent across all provinces and territories. The difference ranged from 2.5 percentage points in the Saskatchewan (96.4% for females vs. 93.9% for males) to 7.8 points in New Brunswick (92.4% for females vs. 84.6% for males).

Chart 8 Urban Canada Seat Belt Use by Gender of Driver and Vehicle Type - 2005

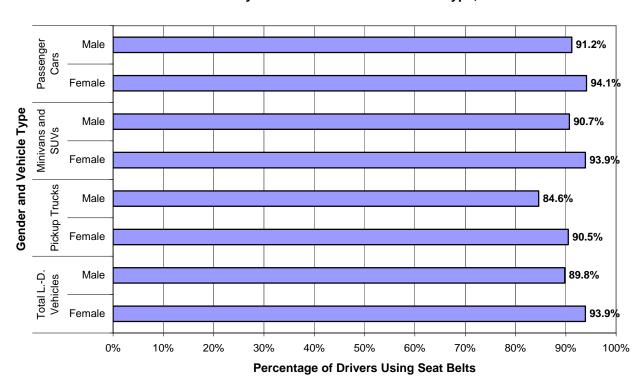


Percentage of Drivers Using Seat Belts

Chart 9 shows a higher percentage of female drivers wearing seat belts (93.9%) than male drivers (89.8%) in Canada.

- The higher rate of seat belt usage by females was consistent across all three vehicle types.
- Other data from the survey show that the higher rate of seat belt usage by females is generally consistent across all provinces and territories. The difference ranged from 3.5 percentage points in Ontario (95.2% for females vs. 91.7% for males) to 12.2 points in Prince Edward Island (91.9% for females vs. 79.7% for males).

Chart 9
Canada Seat Belt Use by Gender of Driver and Vehicle Type, 2004-2005



Seat Belt Usage by Age Group of Drivers

Chart 10 shows the proportion of drivers wearing seat belts in rural communities, from 84.4% of drivers under 25, to 87.9% of those 25 to 49 and 89.7% of those 50 and older.

- Other data from the rural survey show that the increased rate of seat belt usage with age is generally consistent across the three vehicle types:
 - For drivers of passenger cars, those 50 and older had a usage rate of 92.0% (vs. 90.1% for those 25 to 49 and 86.0% for those under 25).
 - For drivers of minivans and SUVs, those 50 and older had a usage rate of 90.6% (vs. 89.8% for those 25 to 49 and 86.0% for those under 25).
 - For drivers of pickup trucks, those 50 and older had a usage rate of 83.2% (vs. 80.6% for those 25 to 49 and 75.1% for those under 25).

Chart 10
Rural Canada Seat Belt Use by Age Group of Driver - 2004

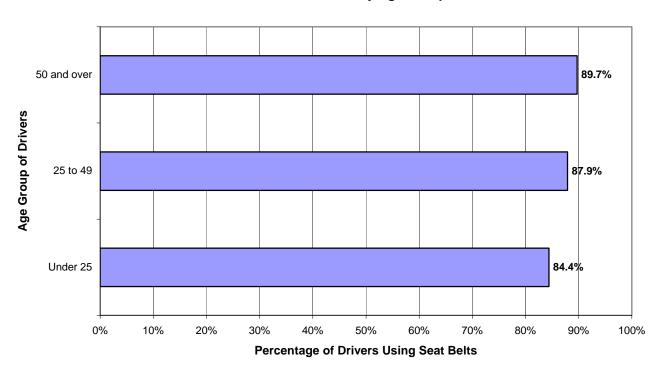


Chart 11 shows the proportion of drivers wearing seat belts in urban communities, from 87.4% of those under 25, to 92.3% of those 25 to 49 and 92.5% of those 50 and older.

- Other data from the urban survey show that the increased rate of seat belt usage with age is generally consistent across the three vehicle types:
 - For drivers of passenger cars, those 50 and older had a usage rate of 93.1% (vs. 93.5% for those 25 to 49 and 88.9% for those under 25).
 - For drivers of minivans and SUVs, those 50 and older had a usage rate of 93.1% (vs. 92.3% for those 25 to 49 and 86.7% for those under 25).
 - For drivers of pickup trucks, those 50 and older had a usage rate of 88.3% (vs. 86.6% for those 25 to 49 and 78.8% for those under 25).

Chart 11
Urban Canada Seat Belt Use by Age Group of Drivers - 2005

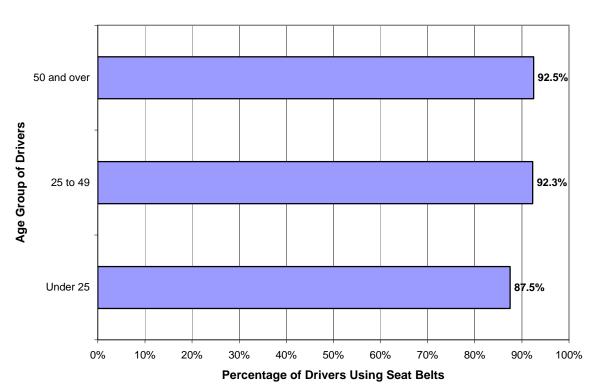


Chart 12 shows the proportion of drivers wearing seat belts in Canada, from 87.0% of those under 25, to 91.8% of those 25 to 49 and 92.1% of those 50 and older.

- Other data from the survey show that the increased rate of seat belt usage with age is generally consistent across the three vehicle types:
 - For drivers of passenger cars, those 50 and older had a usage rate of 93.0% (vs. 93.0% for those 25 to 49 and 88.5% for those under 25).
 - For drivers of minivans and SUVs, those 50 and older had a usage rate of 92.8% (vs. 92.0% for those 25 to 49 and 86.6% for those under 25).
 - For drivers of pickup trucks, those 50 and older had a usage rate of 87.6% (vs. 85.8% for those 25 to 49 and 78.3% for those under 25).

Chart 12
Canada Seat Belt Use by Age Group of Drivers - 2004-2005

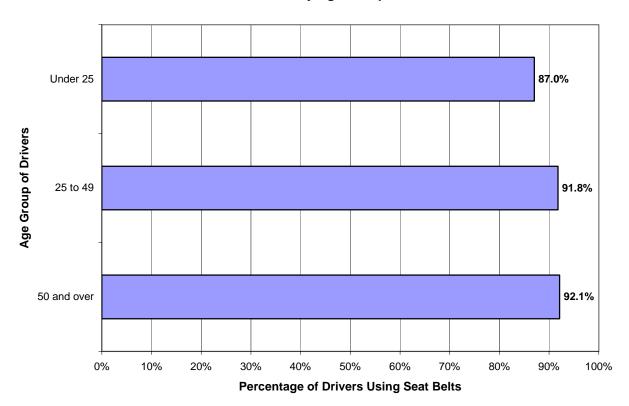
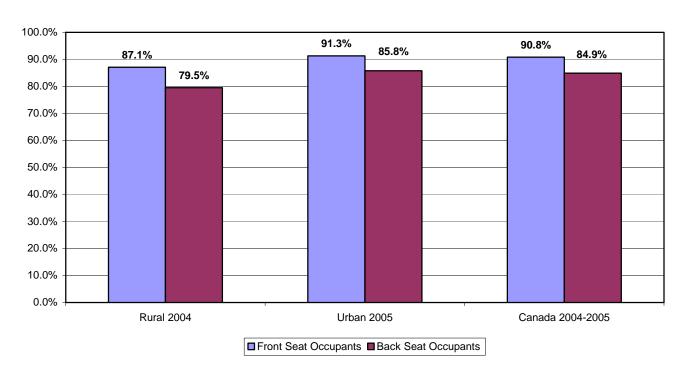


Chart 13 shows the proportion of belted occupants in the front seat and in the back seat of light duty vehicles in Canada. The seat belt usage rate is considerably lower for the back seat occupants of light duty vehicles.

Chart 13
Seat Belt Use for The Front and Back Seat Occupants
2004-2005



CONCLUSION

Road Safety Vision 2010 is targeting a decrease of 30% in the average annual number of road users killed or seriously injured during the 2008-2010 period compared with 1996-2001. Sub-targets include reducing casualties resulting from non-use of restraint systems and decreasing casualties resulting from crashes occurring on rural roadways.

The urban and rural seat belt wearing surveys summarized here represent one of a number of important Vision 2010 initiatives undertaken by the NORP Task Force. The survey results will help build a business case for the adoption of measures to increase seat belt usage rates in Canada by 2010.

The results suggest that Canada is making some progress toward the 95% target for seat belt use for all occupants of light duty vehicles.

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