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Belts get credit for drop in deaths

Dramatic improvement in the fatality rate came when Canadians began to buckle up

BY PATRICK SULLIVAN Special to The Globe and Mail

Most auto makers enjoyed robust profits in 1994, and by year's end the Canadians who drive their products were enjoying a dividend of their own - the country's lowest trafficfatality figures in 39 years.

Transport Canada estimates that 3.021 motor vehicle drivers, passengers, motor cyclists and pedestrians were killed on Canada's roads in 1994, a 16.1-per-cent decrease from the 3,601 deaths recorded in 1993. It is the country's lowest total since 1955.

The department's data indicate that the 1994 decline is part of a general trend that began after 1973, when the record of 6,706 road deaths was set. By 1980, the annual total had dropped to 5,461 deaths, and by 1990 it fell to 3,966.

Chris Wilson, director-general of road safety and motor vehicle regulation at Transport Canada, says there are several reasons for the decrease but most of the credit has to go to increased seat-belt use.

He said surveys show that more than 90 per cent of drivers and passengers routinely buckle up today, and when seat-belt usage gets that high even most high-risk drivers, such as young men, are wearing belts.

"That is when you begin to see dramatic improvements," he said. As recently as 1986, surveys showed that only 63 per cent of Canadians were wearing seat belts.

The decline in traffic fatalities is most visible in hospital emergency rooms. "I personally have noticed it, and I think most emergency physicians would tell you the same thing," said Dr. Alan Drummond of Perth, Ont., a past president of the Canadian Association of Emergency Physicians.

Jan Ahuja, chief of emergency medicine at Ottawa's Civic Hospital, said seat belts are one of emergency doctors' best friends. In 1974, the year he graduated from medical school, their use was not mandatory and 6,290 people died in collisions. He attributes most of the 52-per-cent drop since then to

"The most severe injuries we see involve people who get in trouble by hitting a windshield or steering wheel, or being ejected following a collision - the very things a seat belt prevents," he said.

Safety experts esimate the belts have prevented 16,000 deaths and 300,000 injuries in Canada since 1980. Transport Canada says usage is now high in all provinces. In a 1994 survey, Newfoundland led with 95.7 per cent usage, and Manitoba came last at 86.1 per cent. The national average was 90.1 per cent.

Mr. Wilson said air bags have had an impact on traffic safety, but it is still relatively small because fewer than one in five cars on the road in 1994 were equipped with them.

"Where we do expect them to make a difference is in terms of major injuries that cause long-term problems, such as lost jobs, lifestyle changes and marriage breakdowns. Those numbers haven't been declining very quickly - there were 27,000 major injuries in 1985 and 25,000 in 1992. The decline is encouraging, but it's still small. I think air bags may have an impact by turning major injuries into minor ones."

Douglas Beirness, director of information for the Ottawa-based Traffic Injury Research Foundation, thinks traffic fatalities may now be approaching their lower limit.

He said the auto industry recognized that customers are interested in safety features and moved to provide them, but whether drivers use them properly is another question. Anti-lock brakes, which are now standard on many cars, were expected to reduce the number of accidents because they allow drivers to maintain steering control when brakes are applied, he said, "but this hasn't happened because people don't know how to use them properly."

And regardless of safety improvements, Dr. Ahuja said, a huge problem remains. "The majority of accidents we see are still related to alcohol use, and if I could make one recommendation for change it would be in this area".

A recent study, co-written by Dr. Beirness, supports that view. It found that almost half of all drivers killed on Canadian roads in 1991 had been drinking, and 62 per cent of them had a blood-alcohol level of at least 150 milligrams a decilitre; the legal limit is 80 mg/dl. The proportion of heavily impaired drivers has actually increased since the 1970s, the study indicated.

Until this drunk-driving problem is solved, many physicians say, it won't matter how safe auto makers make their cars.

The article EM9504 reprinted above is used in Figure 11.1 of the STAT 231 Course Materials.