

# STATUS REPORT

INSURANCE INSTITUTE  
FOR HIGHWAY SAFETY

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## Like father, like son

Daughters also follow parents' example

Whether it's coaching Little League or pointing out the Milky Way, most fathers try to pass on their interests and skills to their sons — and daughters, too. It's the same with moms, who always have played a big part in the lives

of their children. Most parents strive to be role models for their sons and daughters.

Whatever influences parents may knowingly seek to impart, they also influence their children in ways they might not be aware of — for example, they may influence the types of drivers their children become. And when it comes to driving, the message seems to be, “Do as I say, not as I do.”

**Parents’ and children’s records:**

A new Institute study finds that children’s driving records are related to the records of their parents. Teens whose parents had three or more crashes on their records were 22 percent more likely to crash at least once, compared with teens whose parents had no crashes.

Likewise, the children whose parents had three or more violations on their records were 38 percent more likely to have a violation on their own records than teens whose parents had none.

These relationships held during the first few years after the teenagers got their licenses. They held whether the children lived in households with one or both parents. The relationships between parents’ driving records and those of their children were similar for daughters and sons.

“Numerous studies have shown that the crash rates of young drivers can be influenced by such factors as lifestyle characteristics and licensing systems,” says Susan Ferguson, Institute vice president.



“However, the influence of parents hasn’t attracted very much attention.”

Institute researchers used data from state driver records in North Carolina to match the crash and violation records of parents and their children between the ages of 18 and 21. The matching procedure resulted in a sample of more than 155,000 young drivers — approximately 83,000 sons and 72,000 daughters.

Results show how predictive parents’ driving records are. “Simply put, parents with crashes and violations are more likely to have children with crashes and violations,” Ferguson says.

In general, parents’ crash records are better predictors than violations of their children’s future crashes. The study finds that children’s crashes would be expected to increase 7 percent for each additional crash that’s on their parents’ records. The corresponding increase in crashes for each recorded violation is 3 percent.

Similarly, children’s violations would be expected to increase 13 percent for each additional violation on their parents’ records and only 3 percent for each additional parent crash.

The study also confirms something that has been found by other researchers — sons have poorer driving records than daughters. Sons in this study were twice as likely as daughters to have at least one violation (20 percent compared with 10 percent). Sons also

were more likely to be involved in police-reported crashes (24 percent compared with 20 percent).

**Implications for graduated licensing:**

The influence of parents on the driving behavior of their children has attracted some attention recently with the introduction of graduated licensing systems, under which parents are expected to enforce various driving restrictions and provide supervised practice behind the wheel (see *Status Report*, Feb. 6, 1999; on

the web at [www.highwaysafety.org](http://www.highwaysafety.org)). “Parental influence, along with other lifestyle characteristics of children, shape the response to particular graduated licensing requirements,” Ferguson points out. “Of course, not all parents are going to be ideal teachers or supervisors as their children learn how to drive.”

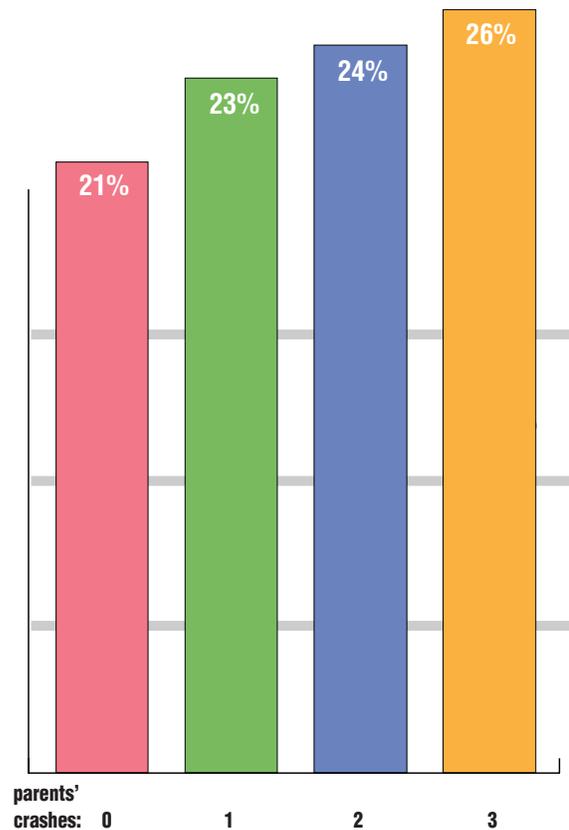
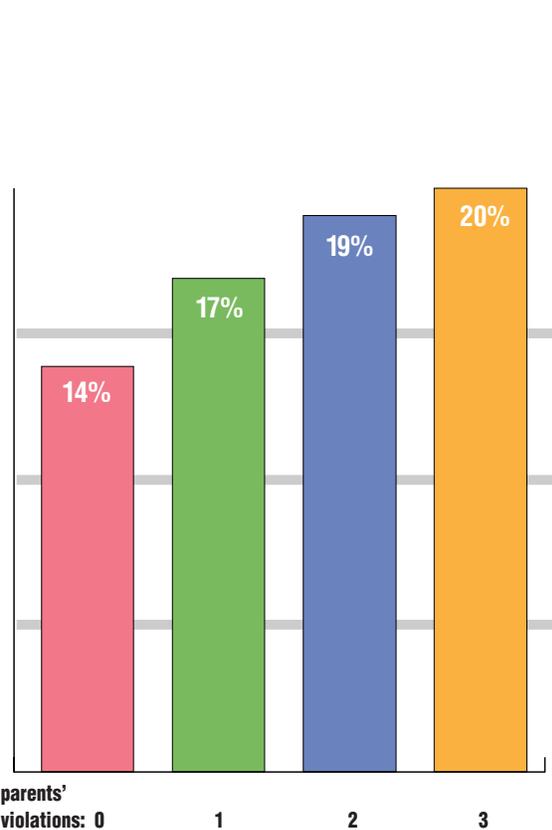
Ferguson cautions that this shouldn’t call into question the overall benefits of the supervised driving requirements under graduated licensing systems. Even

parents with bad driving records are likely to be motivated by concerns about the safety of their children, so their supervision will still allow the children to accumulate extensive experience behind the wheel in lower risk situations.

For a copy of “The Relationship of Parent Driving Records to the Driving Records of their Children” by S.A. Ferguson et al., write: Publications, Insurance Institute for Highway Safety, 1005 North Glebe Road, Arlington, VA 22201.

**TRAFFIC VIOLATIONS:  
Percent of children with violations  
by number of parents’ violations**

**MOTOR VEHICLE CRASHES:  
Percent of children with crashes  
by number of parents’ crashes**



Parents’ violations and crashes are during a 5-year period. Children’s are during the same 5 years or time license has been held, whichever is shorter.

## Tractor-trailers, other commercial vehicles are in more multiple-vehicle crashes on most toll roads; single-vehicle crash rate is lower for commercials

Commercial vehicles on toll roads are involved in fewer single-vehicle crashes per mile, compared with passenger vehicles, but commercial vehicles are in more multiple-vehicle crashes on most toll roads. These are the findings of a new Institute study.

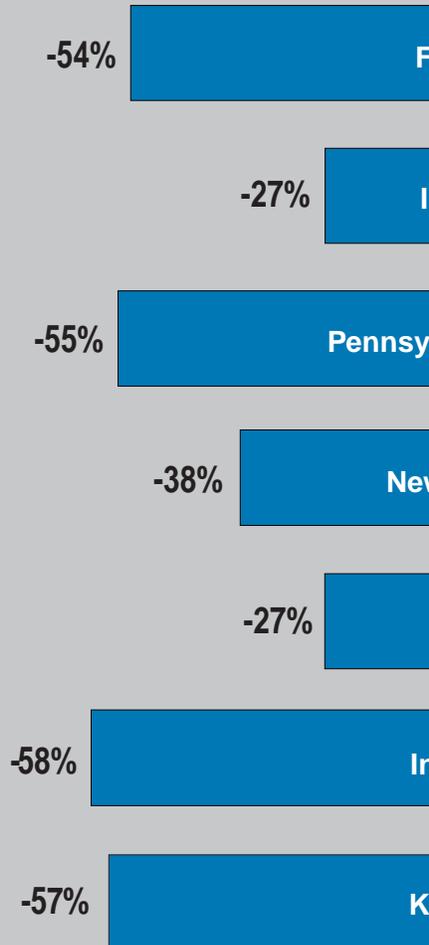
Overall, large trucks are in fewer crashes per mile than passenger vehicles, but they're in more fatal crashes per mile, according to the U.S. Department of Transportation. Large trucks account for about 3 percent of the vehicle fleet and 7 percent of miles driven, but they are involved in 22 percent of all passenger vehicle occupant deaths in crashes of two or more vehicles. Ninety-eight percent of those killed in two-vehicle crashes involving large trucks and passenger vehicles are riding in the passenger vehicles.

One reason for the lower overall crash rate of large trucks is that they accumulate almost twice as many of their miles (41 percent) on interstate highways as do passenger cars (22 percent). The interstate system is safer than other roads, so comparisons of large truck and passenger vehicle crash rates per unit of travel should control for type of road.

Mileage and crash data are routinely collected on the ticket-controlled sections of toll roads, making it possible to compare passenger and commercial motor vehicle crash rates on a per-mile basis. This analysis is based on data from toll roads in Florida, Illinois, Indiana, Kansas, New York, Ohio, and Pennsylvania.

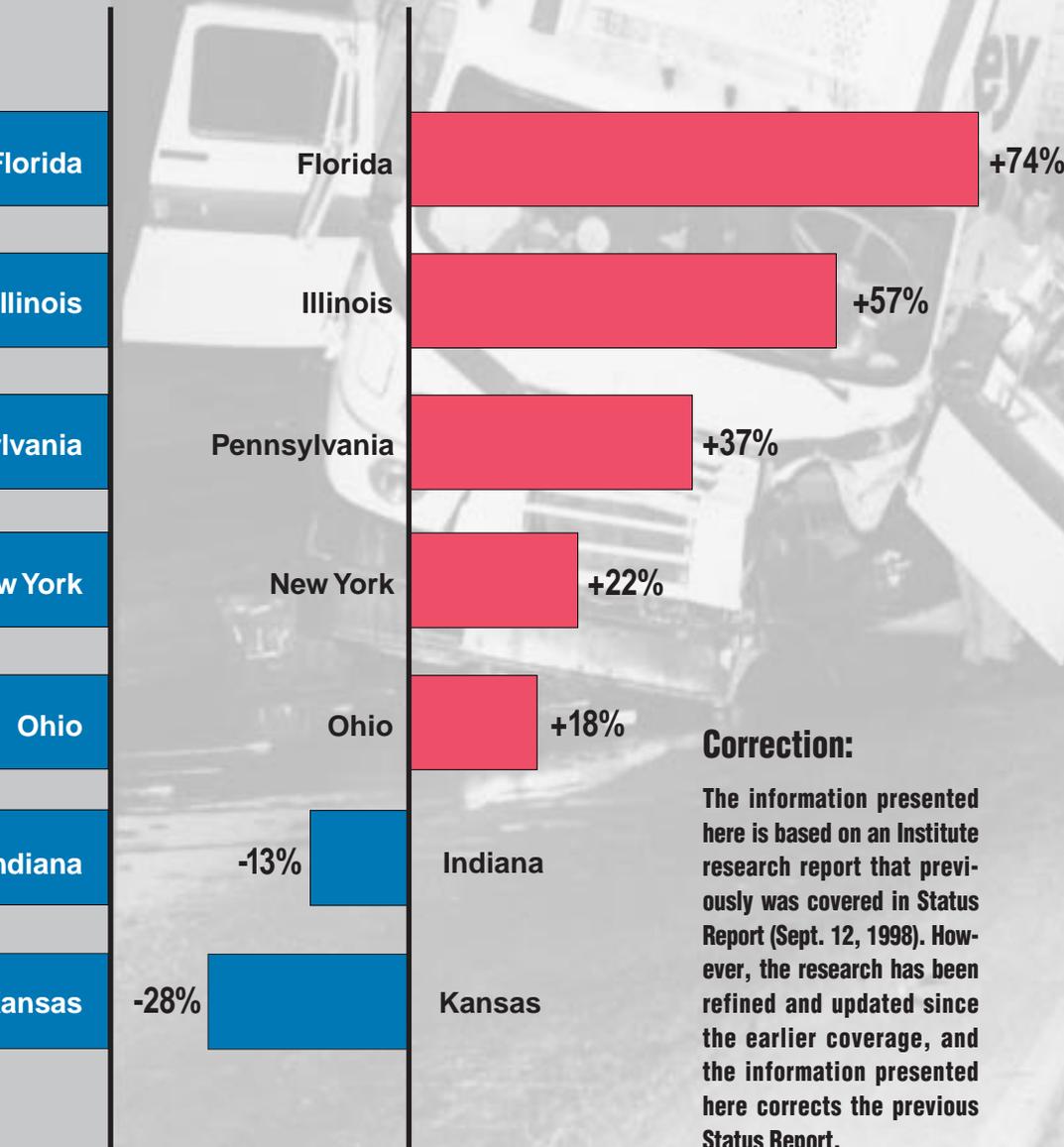


**Single-vehicle  
Percent difference in  
crash rates, large commercial  
compared with passenger**



crashes:  
per-mile  
vehicles  
vehicles

**Multiple-vehicle crashes:  
Percent difference in per-mile  
crash rate, large commercial vehicles  
compared with passenger vehicles**



**Correction:**

The information presented here is based on an Institute research report that previously was covered in Status Report (Sept. 12, 1998). However, the research has been refined and updated since the earlier coverage, and the information presented here corrects the previous Status Report.

In all seven states, commercial vehicles (primarily tractor-trailers and single-unit trucks) were 27 to 58 percent less likely than passenger vehicles to be in single-vehicle crashes. In five of the seven states, commercial vehicles were anywhere from 18 to 74 percent more likely to be in multiple-vehicle crashes. In Kansas, large trucks were 28 percent less likely to be in multiple-vehicle crashes, and the 13 percent difference in Indiana wasn't statistically significant.

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The risk of commercial vehicles being in multiple-vehicle crashes resulting in death or serious injury was double that of passenger vehicles in the two states that identified serious injuries, Ohio and Pennsylvania. On the New York Thruway, commercial vehicles had the highest multiple-vehicle crash rates on the most densely traveled sections. They were underinvolved in multiple-vehicle crashes on the Kansas toll road, which had the lowest traffic density.

Whether crash rates were higher or lower for large commercial motor vehicles than for passenger vehicles appeared to depend on crash type, the specific toll road, and traffic density, the researchers concluded.

For a copy of "Commercial and Passenger Motor Vehicle Crashes on Toll Roads" by M. Solomon et al., write: Publications, Insurance Institute for Highway Safety, 1005 North Glebe Road, Arlington, VA 22201.

## Motorists in four countries cite different reasons for buckling up

Compared with motorists in Australia, Canada, and England, those in the United States are the least likely to buckle up out of habit, to avoid a ticket, or because belt use is required by law. This is a main finding of a new Institute survey of more than 2,000 motorists, conducted by telephone across the four countries.

The United States has lower belt use rates (both observed and self-reported) than the other three countries. The U.S. rate is 60-70 percent, compared with much higher rates elsewhere.

Canada registered the highest proportion of motorists who said they had been stopped by police checking for belt use. Higher proportions of Canadians also said they think it's very likely or somewhat likely that unbuckled motorists would be stopped for not using belts.

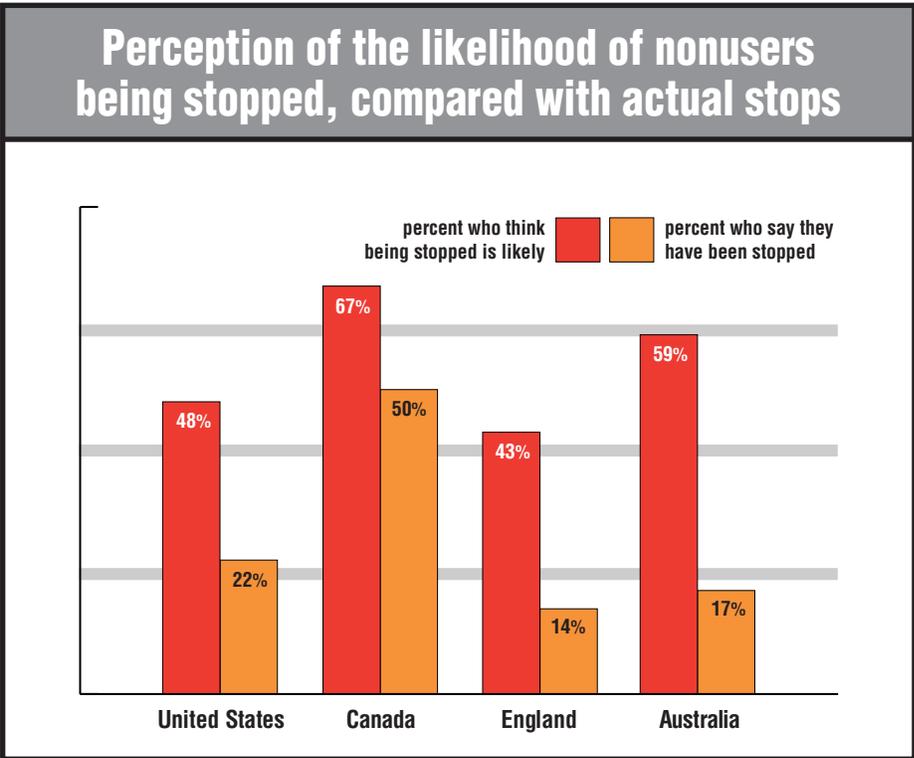
Among the U.S. respondents, there were differences according to the type of belt law in effect. Seventy-five percent of respondents subject to primary enforcement said they always buckle up when driving or riding in the front seat, compared with about 62 percent of respondents in states with secondary enforcement.

Sixteen states and the District of Columbia have primary belt laws, which allow police to stop motorists for belt violations alone. In other states, officers must have some other reason to stop a motorist before issuing a ticket for failing to buckle up.

The survey results indicate that belt use "could be increased by adoption of primary enforcement laws throughout the country and adoption of highly visible enforcement programs" like those in Canada, the researchers conclude.

For a copy of "Self-Reported Belt Use in Four Countries: A Telephone Survey" by M.X. Cammisa et al., write Publications, Insurance Institute for Highway Safety, 1005 North Glebe Road, Arlington, VA 22201.

Telephone survey of belt use				
	United States	Canada	England	Australia
<b>Reasons for using belts:</b>				
to avoid a ticket	56	59	66	71
out of habit	74	77	82	84
because law requires it	56	67	80	75
<b>Always use belts:</b>				
as driver	67	80	85	85
as front-seat passenger	68	79	88	90
as rear-seat passenger	38	56	45	78
<b>Have been stopped and checked for belt use</b>				
	22	50	14	17
<b>Think nonusers are likely to be stopped</b>				
	48	67	43	59
Results are shown as percentages of respondents answering "yes."				



# For fourth year in a row, utility vehicles have highest theft losses

Three of the five passenger vehicles with the highest insurance losses for theft are utility vehicles — the Range Rover, Mitsubishi Montero, and Montero Sport. This is the fourth year in a row utility vehicles have dominated the “worst” list of theft losses, published by the Highway Loss Data Institute (HLDI).

Overall theft losses for the 1996-98 Range Rover are more than 12 times higher than the average for all passenger cars.

During the 1980-98 model years, HLDI reports that the frequency of theft claims declined, although this trend was offset by increasing loss payments per claim. “The continuing decline in theft frequencies is

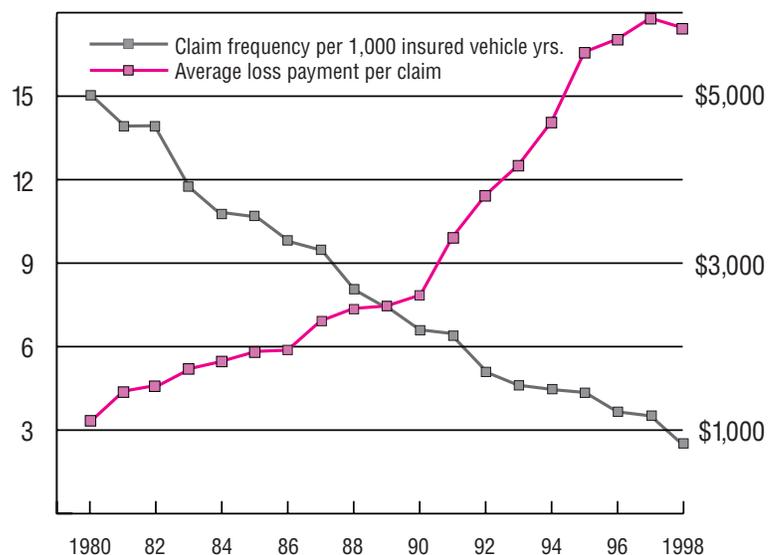
good news, and some of it is because of the sophisticated antitheft devices on more and more new cars,” HLDI senior vice president Kim Hazelbaker points out. “On the other hand, professional thieves are more likely to ship the cars they steal out of the country, which lessens the chances for recovery.”

## Worst theft loss results (100=average for all cars)

<b>Land Rover Range Rover long wheelbase**</b>	<b>midsize utility vehicle</b>	<b>1,253</b>
<b>Mercedes S class long wheelbase**</b>	<b>very large luxury 4-door car</b>	<b>920</b>
<b>Mitsubishi Montero Sport 4x4*</b>	<b>midsize 4-door utility vehicle</b>	<b>637</b>
<b>Acura Integra 2-door</b>	<b>small 2-door car</b>	<b>558</b>
<b>Mitsubishi Montero 4x4</b>	<b>midsize 4-door utility vehicle</b>	<b>528</b>
<b>Lexus LS 400**</b>	<b>large luxury 4-door car</b>	<b>481</b>
<b>Acura Integra 4-door</b>	<b>small 4-door car</b>	<b>427</b>
<b>Nissan Maxima</b>	<b>midsize 4-door car</b>	<b>424</b>
<b>BMW 7 series long wheelbase**</b>	<b>very large luxury 4-door car</b>	<b>411</b>
<b>Toyota 4Runner 4x4</b>	<b>midsize 4-door utility vehicle</b>	<b>352</b>

\* Results for the Montero Sport are for 1997-98 models only; all other results are for 1996-98 models.  
 \*\* 1996-98 models equipped with standard passive immobilizing antitheft devices (except Lexus LS 400s 1997-98s only).

## Theft claim frequency & average loss payment per claim, 1980-98



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