

INSURANCE INSTITUTE FOR HIGHWAY SAFETY

NEWS RELEASE

ANTILOCK BRAKES DON'T REDUCE FATAL CRASHES; PEOPLE IN CARS WITH ANTILOCKS AT GREATER RISK – BUT UNCLEAR WHY

ARLINGTON, VA – Dec. 10, 1996 – Cars with antilock brakes are more likely than cars without them to be in crashes fatal to their own occupants. In particular, antilock cars are more likely to be in fatal single-vehicle crashes. These are the findings of a new Insurance Institute for Highway Safety study comparing the fatal crash experience of cars with antilocks and otherwise identical models with regular brakes.

"These findings add to evidence that antilocks aren't producing overall safety benefits," Institute President Brian O'Neill points out. According to previous Highway Loss Data Institute research, antilocks aren't reducing the frequency or cost of insurance claims for vehicle damage. Federal studies also show no overall benefits.

For the Institute's study, researchers separated fatal crashes according to who died – occupants of antilock cars, occupants of other vehicles, pedestrians, or bicyclists. At the same time, researchers looked at type of crash – single-vehicle, multiple-vehicle, rollover, or run-off-the-road. The largest increase in the incidence of crashes fatal to people in antilock cars occurred in single-vehicle impacts (see attached table). Smaller increases were found in the risk of multiple-vehicle crashes fatal to people in vehicles with antilocks. For occupants of other vehicles and nonoccupants (bicyclists, pedestrians), results were less clear. For one group of vehicles studied (1992 General Motors cars with standard antilocks), the risk of fatal crashes decreased. But this effect wasn't found for other models that had adopted antilocks earlier (see table).

"We don't know why antilocks aren't producing the benefits many people expected," O'Neill says. "Drivers might feel overconfident and drive faster or take more risks. They might pump brakes or not hit the pedal hard enough so the antilock feature isn't activated. Drivers might react to pedal feedback from antilocks and ease off the brakes, which deactivates antilocks. Or they could be braking hard and wrenching the wheel in emergencies to avoid one type of crash while steering into another. It could be any of these, a combination, or something else. We need more study to find out why antilocks are impressive on the test track but not on the road."

Consumers "need to keep a couple of things in mind," O'Neill suggests. "One is that antilocks have more to do with maintaining control in potential emergencies than stopping on a dime. And remember not to pump antilocks, as drivers have been taught to do in emergencies. It's a good idea to try antilocks out. When it's wet, go somewhere off-road like a parking lot and practice hard braking so the antilock feature is engaged. See how the brakes feel because it's important to 'unlearn' past braking habits and keep hard, continuous brake pressure instead."

**FATAL CRASH RISK RATIOS FOR VEHICLES WITH ANTILOCK BRAKES
COMPARED WITH VEHICLES WITHOUT ANTILOCK BRAKES**

WHO IS KILLED	CRASH TYPE	ROAD SURFACE CONDITION	RISK RATIOS BY VEHICLE GROUPS	
			GM Cars: 1992s With vs. 1991s Without Antilocks	Other Vehicles With vs. Without Antilocks
All	All Crash Types	All	1.03	1.16
		Wet	0.92	1.18
		Dry	1.06	1.15
	Single-Vehicle	All	1.17	1.28
		Wet	0.99	1.26
		Dry	1.21	1.28
	Multiple-Vehicle	All	0.95	1.07
		Wet	0.89	1.13
		Dry	0.98	1.05
People in Antilock Vehicles	All Crash Types	All	1.24	1.26
		Wet	1.08	1.40
		Dry	1.30	1.23
	Single-Vehicle	All	1.39	1.45
		Wet	1.19	1.65
		Dry	1.44	1.42
	Multiple-Vehicle	All	1.13	1.06
		Wet	1.02	1.20
		Dry	1.19	1.02
People in Nonantilock Vehicles	Multiple-Vehicle	All	0.80	1.01
		Wet	0.87	0.91
		Dry	0.78	1.03
Nonoccupants (Pedestrians, Bicyclists)	All Crash Types	All	0.74	0.99
		Wet	0.26	0.90
		Dry	0.86	1.01

Note: Risk ratios significantly different from 1.0 are shown in **bold type**. A ratio greater than 1.0 means antilock vehicles were more likely to be in fatal crashes. For example, a risk ratio of 1.25 means the antilock vehicles were involved in 25 percent more fatal crashes than the otherwise identical models without antilocks. In contrast, a risk ratio of 0.75 means the antilock vehicles were in 25 percent fewer fatal crashes.