

# INSURANCE INSTITUTE FOR HIGHWAY SAFETY

## NEWS RELEASE

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### **MOTORCYCLES WITH ANTILOCK BRAKES HAVE FEWER FATAL CRASHES AND LOWER INSURANCE LOSSES THAN BIKES WITHOUT ANTILOCKS**

ARLINGTON, VA — Antilock brakes for motorcycles are working as designed to reduce the chances of crashing, removing some of the risk that comes with riding on 2 wheels. A new study by the Insurance Institute for Highway Safety indicates that motorcycles with antilocks versus without are 37 percent less likely to be in fatal crashes per 10,000 registered vehicle years. Bolstering this finding is a separate analysis by the affiliated Highway Loss Data Institute (HLDI) of insurance claims filed for damage to motorcycles. Bike models with antilocks have 22 percent fewer claims for damage per insured vehicle year (a vehicle year is 1 vehicle insured for 1 year, 2 insured for 6 months, etc.) than the same models without antilocks. Two additional new reports by HLDI underscore the real-world benefits of helmet laws that apply to all riders and raise questions about the safety benefits of state-mandated training for young riders. A new Institute survey of riders examines rider views of antilocks, helmets, and helmet laws.

Crash avoidance technology like motorcycle antilocks is especially important because more people are taking up riding and more are dying in crashes. Rider deaths topped 5,000 in 2008 — more than in any year since the federal government began collecting fatal crash data in 1975. Motorcycle registrations rose to 7.7 million in 2008, up from 4.3 million in 2000, according to R.L. Polk and Company data. The upswing in motorcyclist deaths comes amid record lows for fatalities in car crashes, prompting the Institute and HLDI to look harder at measures to stem motorcyclist deaths.

“It’s a troubling trend,” says Anne McCartt, Institute senior vice president for research. “No one wants to begrudge motorcyclists the opportunity to ride for fun or to get around town on a bike. As the number of new riders continues to increase, though, it’s becoming more important than ever to lower the crash risk.”

One answer might be to equip more motorcycles with antilocks. Stopping a motorcycle is trickier than stopping a car. For one thing, the front and rear wheels typically have

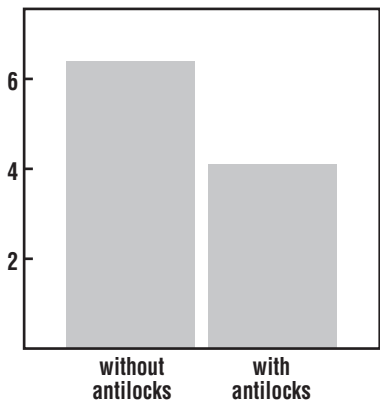
— MORE —

separate brake controls. In an emergency, a rider faces a split-second choice to either brake hard, which can lock the wheels and cause an overturn, or hold back on braking and risk running into the emergency. This is when antilocks can help by reducing brake pressure when they detect impending lockup and then increasing the pressure again when traction is restored. Brake pressure is evaluated multiple times per second, so riders may brake fully without fear of locking up. Antilocks won't prevent every motorcycle crash. They won't help a rider about to be struck from behind, for example.

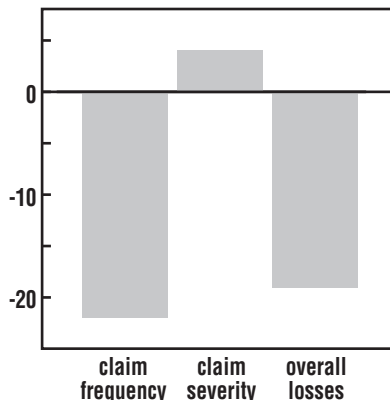
Antilocks are gaining traction among manufacturers and riders. More than half of motorcycle owners recently surveyed by the Institute said they would get antilocks on their next bikes. Buyers can find them on at least 60 new models (go to [iihs.org](http://iihs.org) for a list).

Institute researchers compared the fatal crash experience of antilock-equipped motorcycles against their nonantilock counterparts during 2003-08. HLDI did the same for insurance losses for the same group of motorcycles. HLDI also looked at injury claims.

**FATAL CRASHES**  
per 10,000 motorcycle registrations,  
with and without antilocks, 2003-08



**INSURANCE CLAIMS**  
percent reductions in collision losses  
for 2003-08 models with antilocks



Under medical payment coverage, motorcycles with antilocks registered 30 percent lower claim frequencies than bikes without this feature. Claim frequencies were 33 percent lower under bodily injury liability coverage.

"Motorcycle antilocks do make a difference," McCartt says. "They help make traveling on 2 wheels less risky by reducing the chance of overturning a bike and crashing. Passenger vehicles still are safer, but if you're going to ride we'd recommend getting a motorcycle with antilocks."

**Helmet laws and rider training:** A new HLDI analysis of insurance claims data examines the effectiveness of universal helmet laws covering all riders, and another looks at the impact of state-mandated training for young riders. Key findings include:

- Motorcyclists in states that require all riders to wear helmets are less likely to file insurance claims for medical treatment after collisions, compared with riders in states without helmet laws or where the laws apply to some but not all riders. Helmets reduce head injuries, the leading cause of death among unhelmeted riders.
- The frequency of insurance collision claims for riders younger than 21 is 10 percent higher in states that require riders this age to take a training course before they become eligible for a license to drive a motorcycle, compared with states that don't require training. Although this difference isn't statistically significant, it contradicts the notion that training courses reduce crashes. A potential explanation is that riders in some states are fully licensed once they finish training. This might shorten the permit period so that riders end up with full licenses earlier than if training weren't mandated.

**Motorcyclist survey:** The Institute surveyed 1,818 riders by phone in 2009 to get a picture of nationwide trends in motorcycling. More than half of riders the Institute surveyed said they believe antilocks on motorcycles enhance braking safety, compared with conventional brakes. Fifty-four percent said they would get antilocks on their next bikes. When it comes to crashes, 43 percent said they had been in at least one. Often motorcycle crashes are blamed on other vehicles, not riders, so it is noteworthy that almost two-thirds of the reported crashes involved a single vehicle, and it was the motorcycle.

Seventy-three percent of riders surveyed said they always wear a helmet, and 9 percent said they often wear one. Five percent said they never do. Riders of sport, supersport, and sport touring bikes were most likely to say they always wear a helmet. Riders 18-29 and those 50 and older were more likely to say they always ride helmeted, compared with motorcyclists in their 30s and 40s. Fifty-seven percent of respondents who don't always wear helmets said they would wear them if required by state law. About half of motorcyclists surveyed said they don't favor universal helmet laws, mainly because they want to choose for themselves. Still, 76 percent said helmets make riders safer.

**End 3-page news release on motorcycle brakes, helmets, training**  
**For more information go to [www.iihs.org](http://www.iihs.org)**