

Effectiveness of antilock braking systems in reducing motorcycle fatal crash rates.

Abstract

Author information: Teoh ER

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OBJECTIVE:

Overbraking and underbraking have been shown to be common factors in motorcycle crashes. Antilock braking systems (ABS) prevent wheels from locking during braking and may make riders less reluctant to apply full braking force. The objective of this study was to evaluate the effect of ABS in fatal motorcycle crashes.

METHODS:

Motorcycle drivers involved in fatal crashes per 10,000 registered vehicle years were compared for 13 motorcycle models with optional ABS and those same models without the option during 2003-2008. Motorcycles with optional ABS were included only if the presence of the option could be identified from the vehicle identification number.

RESULTS:

The rate of fatal motorcycle crashes per 10,000 registered vehicle years was 37 percent lower for ABS models than for their non-ABS versions.

CONCLUSION:

ABS appears to be highly effective in preventing fatal motorcycle crashes based on some early adopters of motorcycle ABS technology.