

Motorcycle helmets keep riders alive, review confirms

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Fewer than half of U.S. states require every motorcycle rider — drivers and passengers — to wear a helmet; and four states have no helmet requirements whatsoever. Around the world, the same patchwork legal pattern exists.

Now, an international group of researchers has combined data from a variety of studies to determine how effective helmets really are. Their findings confirm what seems intuitive: Helmet use is highly significant in reducing both accidental death and injury, reducing head injury risk by 69 percent and death by 42 percent.

“Motorcycle helmets protect motorcyclists who crash from sustaining head injury, and the results also suggest that motorcycle helmets protect motorcyclists who crash from death,” said lead author Dr. Betty Liu, epidemiologist at Oxford University in England.

“The findings are important to consider in those countries with without mandatory motorcycle helmet laws, as well as in jurisdictions with weak or partial helmet legislation,” added co-author Dr. Rebecca Ivers, head of the Injury Prevention Program at the George Institute for International Health in Sydney, Australia.

The review appears in the current issue of *The Cochrane Library*, a publication of The Cochrane Collaboration, an international organization that evaluates medical research. Systematic reviews draw evidence-based conclusions about medical practice after considering both the content and quality of existing medical trials on a topic.

This review is an update to one conducted by the same researchers, published in 2004. They include data from eight additional studies in the new review.

The review “confirms the belief of specialists in emergency medicine and should put an end to any

further debate about the protective role of helmets regarding head injury in motorcycle riders,” said Robert McNamara, M.D., chairman of the emergency medicine department at Temple University School and spokesman for the American Academy of Emergency Medicine.

McNamara said that, at this point, “the debate over mandating use in adults should center on personal freedom to accept a known risk.”

The authors say that, despite differences in methodology of the 61 included studies, there was a “remarkable consistency” in results, especially pertaining to death and head injury.

“The review supports the view that helmet use should be actively encouraged worldwide for rider safety,” they conclude.

The reviewers say that the analysis could not specify the effects of helmet use on facial and neck injuries, and there was insufficient evidence to determine which type of helmet is most protective.

Addressing the public policy implications of the findings, McNamara said, “The personal freedom issue must be balanced with the cost to society of the care of patients with catastrophic head injury. Riders cite the pleasure of going helmet-less, but often the cost of care for the injured motorcyclist is passed on to society at large.”

Motorcycle riders might not realize how much is at stake, he said. They “may not fully understand the scientifically demonstrated level of risk involved in riding without a helmet and might assume the risks are acceptable if the law does not prohibit it. In that context, the American Academy of Emergency Medicine believes that states should require helmet use in all age groups.”

In many developing nations, a majority of traffic-related injuries occur among pedestrians and

motorcycle/motorbike riders, the authors said; they cite the example of Malaysia where, in 1994, 57 percent of all road deaths were riders of motorized two-wheeled vehicles. They conclude that, given the significant influence on worldwide mortality of impact head injuries, “the results of this review should be contemplated widely.”

Source: Center for the Advancement of Health

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