

## The Hurt Report

The *Motorcycle Accident Cause Factors and Identification of Countermeasures* study contributed significantly to our understanding of motorcycle crashes and how they might be avoided. It was conducted by the University of Southern California Traffic Center under contract with the National Highway Transportation Safety Administration. It is generally referred to as the Hurt Study or the Hurt Report after its principal author Hugh H. (Harry) Hurt Jr. The study team conducted detailed investigations of 900 motorcycle accidents, reviewed 3600 accident reports, and interviewed 2310 riders.

The final report was published in 1981. Much has changed regarding motorcycles, riders, and the riding environment since the Hurt Report was published, and additional studies are currently being conducted to provide updated information. In general, however, the findings of the Hurt Report still have a high degree of applicability to contemporary safety guidance.

The purpose of this article is to present some of the findings of the Hurt Report that will be useful to us in our efforts to ride safely and to provide some reference sources for further inquiries regarding the study and its results. The Hurt Study resulted in 55 findings which advanced our knowledge of the causes of motorcycle accidents. Fourteen of the findings are directly quoted below:

Approximately three-fourths of these motorcycle accidents involved collision with another vehicle, which was most usually a passenger automobile.

Approximately one-fourth of these motorcycle accidents were single vehicle accidents involving the motorcycle colliding with the roadway or some fixed object in the environment.

In the single vehicle accidents, motorcycle rider error was present as the accident precipitating factor in about two-thirds of the cases, with the typical error being a slide-out and fall due to over-braking or running wide on a curve due to excess speed or under-cornering.

In the multiple vehicle accidents, the driver of the other vehicle violated the motorcycle right-of-way and caused the accident in two-thirds of those accidents.

The failure of motorists to detect and recognize motorcycles in traffic is the predominating cause of motorcycle accidents. The driver of the other vehicle involved in collision with the motorcycle did not see the motorcycle before the collision, or did not see the motorcycle until too late to avoid the collision.

The most frequent accident configuration is the motorcycle proceeding straight then the automobile makes a left turn in front of the oncoming motorcycle.

Intersections are the most likely place for the motorcycle accident, with the other vehicle violating the motorcycle right-of-way, and often violating traffic controls.

The view of the motorcycle or the other vehicle involved in the accident is limited by glare or obstructed by other vehicles in almost half of the multiple vehicle accidents.

Conspicuity of the motorcycle is a critical factor in the multiple vehicle accidents, and accident involvement is significantly reduced by the use of motorcycle headlamps-on in daylight and the wearing of high visibility yellow, orange or bright red jackets.

Motorcycles equipped with fairings and windshields are underrepresented in accidents, most likely because of the contribution to conspicuity and the association with more experienced and trained riders.

Motorcycle rider training experience reduces accident involvement and is related to reduced injuries in the event of accidents.

Lack of attention to the driving task is a common factor for the motorcyclist in an accident.

Almost half of the fatal accidents show alcohol involvement.

The use of the safety helmet is the single critical factor in the prevention or reduction of head injury; the safety helmet which complies with FMVSS 218 is a significantly effective injury countermeasure.

Although the statistics have changed since the report's publication, most of the findings are still relevant. David L. Hough, author of *Proficient Motorcycling*, described the Hurt Report as "the most comprehensive motorcycle safety study of the 20th century." In an interview two decades after the study was completed, Professor Hurt told Mr. Hough, "The more time goes by, the less things look different. Riders today have the same sort of accidents as riders in the 1970s, except that today they crash much more expensive bikes." For an excellent presentation of the study's findings and their current applicability, Chapter 2 of the book *Ride Hard, Ride Smart* by Pat Hahn is recommended. He notes, "The facts are still very useful today. Even some of the dated items, at their root, are still meaningful."

The full 425 page report can be purchased from the National Technical Information Service (NTIS) at [www.ntis.gov](http://www.ntis.gov) (Accession Number PB81206443). Information is also available on the internet at [www.en.wikipedia.org/wiki/Hurt\\_Report](http://www.en.wikipedia.org/wiki/Hurt_Report). This website has links to the list of findings as well as the complete report. The report is very readable, and the safety conscious rider will probably find it very interesting.

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