

Developing an international survey of bicycle and helmet usage

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ABSTRACT

The European Union-funded collaborative network, COST Action TU1101: Towards safer bicycling through optimization of bicycle helmets and usage, aims to increase scientific knowledge about bicycle helmets in regards to traffic safety and to disseminate this knowledge to stakeholders, including cyclists, legislators, manufacturers, and the scientific community. The COST research team is developing a uniform international survey to better understand attitudinal and other factors that may influence bicycle and helmet usage, as well as crash risk. The online survey is being distributed by project partners in Europe, Israel, Australia, and potentially the US and Canada. The survey contains four types of questions: (1) biographical data, (2) frequency of cycling and amount of cycling for different purposes (e.g., commuting, health, recreation) and in different environments (e.g., bicycle trails, bike lanes, on kerbs, in traffic), (3) frequency and circumstances for use and non-use of helmets, attitudes and reasons for it, and (4) crash involvement and level of reporting to the police. While the potential value of comparative data across countries with very different cycling cultures and safety levels is substantial, there are numerous challenges in developing, conducting, and analyzing the results of the survey. This presentation will focus on the scope of the international study, methodological issues and pitfalls of such a collaborative effort, and on initial results from selected countries. To illustrate, two findings from the preliminary Israeli survey indicate that: (1) none of the crashes were reported to the police including the ones involving hospital admission. Although underreporting of bicycle crashes by police is well documented in all countries the extent is unknown, and can be extreme. (2) Older riders tend to ride more for health/exercise reasons, while younger riders tend to ride more for commuting. Thus there is an interaction between riders' age and the place and times of riding.

Keywords: bicycle helmets, cycling participation, survey, international comparisons.