

**MOTORCYCLE NON-STANDARD HELMET USE IN AN URBAN AREA OF MEXICO**

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**Background** In Mexico, as in other low and middle income countries, the use of motorcycles has become a popular and increasing mean of transportation. During 2009, 1.2 million motorcycles were registered. This represents 1114 motorcycles per 100 000 inhabitants, figure that has tripled in the last decade.

**Objective** To estimate the prevalence of helmet use and the prevalence and factors associated to non-standard helmet use (NSHU) among motorcyclists of Cuernavaca.

**Methods** A cross-sectional study that included observations on public thoroughfare and a survey in a sample of motorcyclists stopping at petrol stations was performed by researchers of the National Institute of Public Health. Data were collected on a daily basis, during daylight hours in February–March 2009 and March 2010.

**Results** 1286 motorcyclists were observed. Prevalence of helmet use was 78%. Helmet use was higher in drivers (84%) than passengers (37%) and amongst males (81%) compared to females (42%). From the 493 motorcyclists interviewed, prevalence of NSHU was 64.8%. Compared to those with bachelor or higher studies, those with secondary school (OR=1.80, 95% CI 1.01 to 3.19) and those with elementary or less school (OR=3.48, 95% CI 1.14 to 10.50) showed more NSHU. Travelling for leisure activity or riding for pleasure (OR=0.25, 95% CI 0.12 to 0.51), travelling in a <500 cc motorcycle (OR=4.14, 95% CI 2.12 to 8.06), and not owning the motorcycle (OR=0.53, 95% CI 0.34 to 0.82) also showed association.

**Significance** Current legislation does not require helmets to be 'standard'. Given the lack of information about actual security and protection provided by non-standard helmets, the high prevalence of non-standard helmet use found raises the need to change Mexicans laws.