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## MORTALITY BY UNINTENTIONAL INJURIES IN METROPOLITAN FRANCE, 2000–2012

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Background In metropolitan France (63 million inhabitants), around 25,000 people die each year as a result of unintentional injuries. Deaths from home and leisure injuries (HLI) are more frequent than from road traffic injuries (RTI), followed by occupational injuries (OI). The objective of this study was to measure and describe the epidemiological characteristics of deaths due to unintentional injuries in metropolitan France from 2000 to 2012. Methods HLI data come from death certificates, with an exhaustive collection. Causes of death are coded using the external causes of injury codes of the International Classification of Diseases, 10<sup>th</sup> revision. The results are expressed in numbers, crude death rates, and age-adjusted death rates. RTI data come from police records[...]. The estimation of the number of fatal OI was established from the data of the social insurance compensation funds for workers.

Results In 2012, 21,470 deaths due to HLI occurred in France. Almost half of these deaths were due to falls, particularly frequent among the elderly. Between 2000 and 2012, a decrease of 2.2% (p < 0,001) of the annual mortality rate was registered. In 2011, RTI resulted in 3,793 deaths. Between 2001 and 2010, a very important reduction in road fatalities was noticed: - 52%, mostly the consequence of the large implementation of automated speed controls during that decade. As regards OI, the annual number of deaths is estimated at 1,557 (95% CI: 1,478–1,640) for the period 2002–2004.

**Conclusions** Despite the decrease between 2000 and 2012, injuries remain a significant cause of death in France. Most of these deaths could be avoided with adapted prevention, regulation and policy measures.

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## EPIDEMIOLOGY OF FALL INJURY IN RURAL BANGLADESH

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Background According to the World Health Organisation, globally falls are the second leading cause of unintentional injury deaths with low- and middle-income countries accounting for about 80% of these deaths. Previous studies from Bangladesh have reported a high burden of fall injuries especially among children. The overall goal of this study is to describe the burden of fall injuries in rural Bangladesh and to identify risk factors.

Methods In 2013, a large household survey covering 1,169,593 population was conducted in seven rural sub-districts of Bangladesh to assess burden of all injuries including falls. The recall periods for non-fatal and fatal injuries were 6 and 12 months respectively. Descriptive, bivariate and multiple logistic regressions analysis were conducted.

Results During the recall period, the rates of non-fatal and fatal falls were 36.3 per 1000 and 5 per 100,000 population

respectively. After adjusting for covariates, compared to <18 years old, >64 years old had 180 times higher odds (p < 0.05) of experiencing fatal falls. Risk of non-fatal falls was higher at extremes of age. Compared to <1 year old, the adjusted odds of experiencing non-fatal falls were 3.4 (p < 0.001) and 2.6 (p < 0.001) times higher for >64 years olds and 1–4 years old respectively. Lower limb and waist injuries were frequent following fall. Among <1 year olds 35% had head injury while among >64 years old about 39% had lower limb and waist injuries. Injuries to all other body parts except waist were frequent among men. Most (57%) non-fatal falls occurred in internal or external home environment especially at extremes of age. About 70% of non-fatal and 59% of fatal falls were at same level with about 62% occurring on sidewalk/street. Nearly 50% of fatal and 27% of non-fatal different level falls were from a tree.

Conclusions Elderly and children are more vulnerable for falls in Bangladesh. The injury patterns and risk factors of falls differ by demographic factors.

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## ASSOCIATED FACTORS TO SEVERE INJURIES OF MOTORCYCLISTS, GUADALAJARA METROPOLITAN AREA AND ZAPOTLANEJO

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Background Traffic events where motorcyclists are involved are a phenomenon increasingly frequent in Mexico. The use of less fuel and the practical to drive this vehicle makes the motorcycle a convenient mean of transport for a large sector of the population. For this reason, the objective is to analyse the associated factors to severe injuries of motorcyclists involved in traffic events in the Guadalajara metropolitan area and the municipality of Zapotlanejo in Jalisco, Mexico.

**Methods** This is a cross-sectional study made to injured motorcyclists in the Guadalajara metropolitan area and the municipality of Zapotlanejo who were care in the Antiguo Hospital Civil de Guadalajara "Fray Antonio Alcalde". The people selected were drivers or occupants of the motorcycle crashed, of any sex and age and the traffic event in what they were involved. A model of logistic regression was performed, which included the above variables with a p = <0.25.

Results The risk factors for severe injuries were: the motorcycle does not work correctly before the accident (OR 76.89, 2.08–2839.25), the motorcyclist deemed to have committed a traffic violation at the time of the event (OR 6.88, 1.30–36.26), the injured resident in the Guadalajara metropolitan area (OR 7.58, 1.15–50.17), drive a motorcycle unknowing if was "salvage" or not (OR 6.88, 1.30–36.26). The factors that reduce the risk were: drive other motorcycle except Italika (OR 0.06, 0.008–0.41) and have had the crash in a straight road or in a crossroad (OR 0.10, 0.02–0.61).

Conclusions There are elements of the motorcyclist, the motorcycle and the physical environment that increase or decrease injury severity of motorcyclists without health insurance. For this public health problem could be necessary promote and create more awareness about road safety in motorcyclists. Not only promote the use of helmet, require support other recommendations about motorcycle and physical environment.