Estimation of the burden of home injury due to housing conditions in Europe

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Background and Aims: The authors recently undertook a study for the World Health Organisation estimating the European burden of injuries occurring in the home that can be attributed to remediable structural hazards in the house. In Europe, almost 110,000 people die each year as a result of a home/leisure injury and an estimated 32,000,000 are hospitalised. The 2003-2005 home/leisure fatal injury rate is 22 per 100,000 people Europe-wide, which is more than twice the rate of road fatalities **Methods:** We undertook a review of existing literature on studies that have estimated injury risk associated with features of the home. Using data on the burden of home injury in the WHO European Region, we estimated the impact of two modifiable features of housing on injury incidence, deaths, and disability adjusted life years (DALYs) from fire and falls. **Results:** There were considerable limitations in the safety issues of housing that could be encompassed by this burden of disease estimate due to inadequate surveillance data on both injury and exposures to given housing conditions, and a paucity of adequate studies examining the relationship between housing conditions and injury occurrence. The two aspects of housing conditions we were able to examine were estimated to cause about 7,500 deaths and about 200,000 DALYs per year in the WHO European Region.

Conclusions: Despite limitations in surveillance data and evidence linking housing exposures and injury risk, our estimates of home injury burden imply that improving housing quality and the prevalence of the two safety features smoke detectors and window guards would significantly reduce home injury levels in Europe.