

0618 **EPIDEMIOLOGY AND PREVENTION OF HAND AMPUTATIONS IN GREECE: DATA FROM THE EMERGENCY DEPARTMENT INJURY SURVEILLANCE SYSTEM**

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Hand amputations constitute a major cause of disability and public health concern with significant socio-economic dimensions.

Aim To investigate hand amputation epidemiology, identify risk groups and estimate the potential for prevention.

Methods EDISS in Greece, comprising four hospitals across the country, captures patient and injury information (demographics, accident conditions, injury description, outcome). During 1996–2004, among ~0.5 million cases recorded, 86 211 were hand injuries resulting in 964 amputations (1.1%). To identify preventable amputation causes detailed injury descriptions regarding injury mechanism were examined.

Results Among hand amputations 937 involved fingers, 23 palms and 4 wrists. The estimated (extrapolated) number of amputations was 3940 and the calculated overall incidence rate (IR) 3.62 per 10 000 person-years. The highest IR (8.02) was recorded among males 15–64 years old. The three most common mechanisms involved: tools in 445 (57.8%), doors in 172 (22.3%) and materials in 50 (6.5%) cases; of note, 148 victims were woodworkers (15.3%). The least common causes were animals, jewellery and fireworks (10, 7 and 6 cases respectively). Analysis of the accident conditions revealed the most common causes: lack of preventive measures/appropriate training and work overload. Most amputations due to doors were attributed to non-use of door handle while closing the door or could have been prevented by a chocking door closing mechanism.

Conclusions Amputations of the hand constitute a small but non-negligible percentage of all hand injuries. The main risk group is young males and woodwork professionals, whereas doors pose a significant risk. Raising awareness and implementing simple measures could reduce the burden of this disabling injury.