

0742 **FALL-RELATED HEAD INJURIES AMONG ALPINE SKIERS AND SNOWBOARDERS IN SLOVENIA**

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**Background** Head injuries (HI) as a result of falls in winter sport activities, despite their incidence is not very high, they are due to their high severity of lesion, frequently associated with severe disabilities and complicated rehabilitations.

**Methods** The magnitude of head injuries due to falls among alpine skiers and snowboarders (HIFASS) in Slovenia over the last decade were assessed using multiple nationwide Slovenian data. Hospitalisation-, emergency visitation- and mortality were calculated and compared to data of ski slope injuries. Differences by gender, age and injury were assessed, and annual changes were calculated by poisson regression analysis.

**Results** 78.083 hospitalisations, 98.557 emergency visits and 2.969 deaths due to HI were registered in the observed period, and the HIFASS were minimally represented among them (1.7% hospitalisations, 0.6% emergency visits and 0.3% deaths). Although the decreasing trend for all HI (annual change -2.1%,  $p=0.0001$ ), HIFASS had an increasing secular trend (annual change +3%,  $p=0.001$ ). Individuals younger than 40 years were the most affected and had also mostly severe intracranial lesions or bone fractures. The incidence of HIFASS was about 0.2 per 1000 skier-days.

**Conclusion** Severe, even fatal HIFASS, may be prevented by carrying a helmet. Slovenia has mandatory helmet use legislation for children until 14 years of age. But take into account results of evidence-based systematic analyses, the obligatory helmet use should include all age groups.