

# Injury ED and inpatient admission rates in Europe

Marco Giustini<sup>1</sup>, Gianni Fondi<sup>1</sup>, Rupert Kissel<sup>2</sup>, Dritan Bejko<sup>3</sup>, Samantha Turner<sup>4</sup>, Alessio Pitidis<sup>5</sup>, MDS Reference Group<sup>2</sup>

<sup>1</sup>Italian National Institute of health, Italy

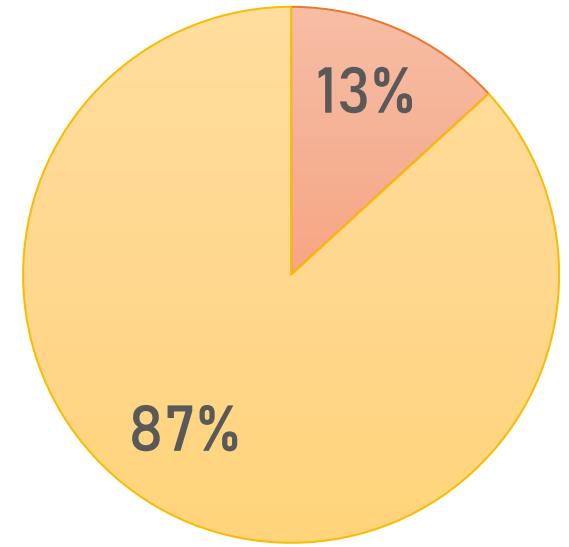
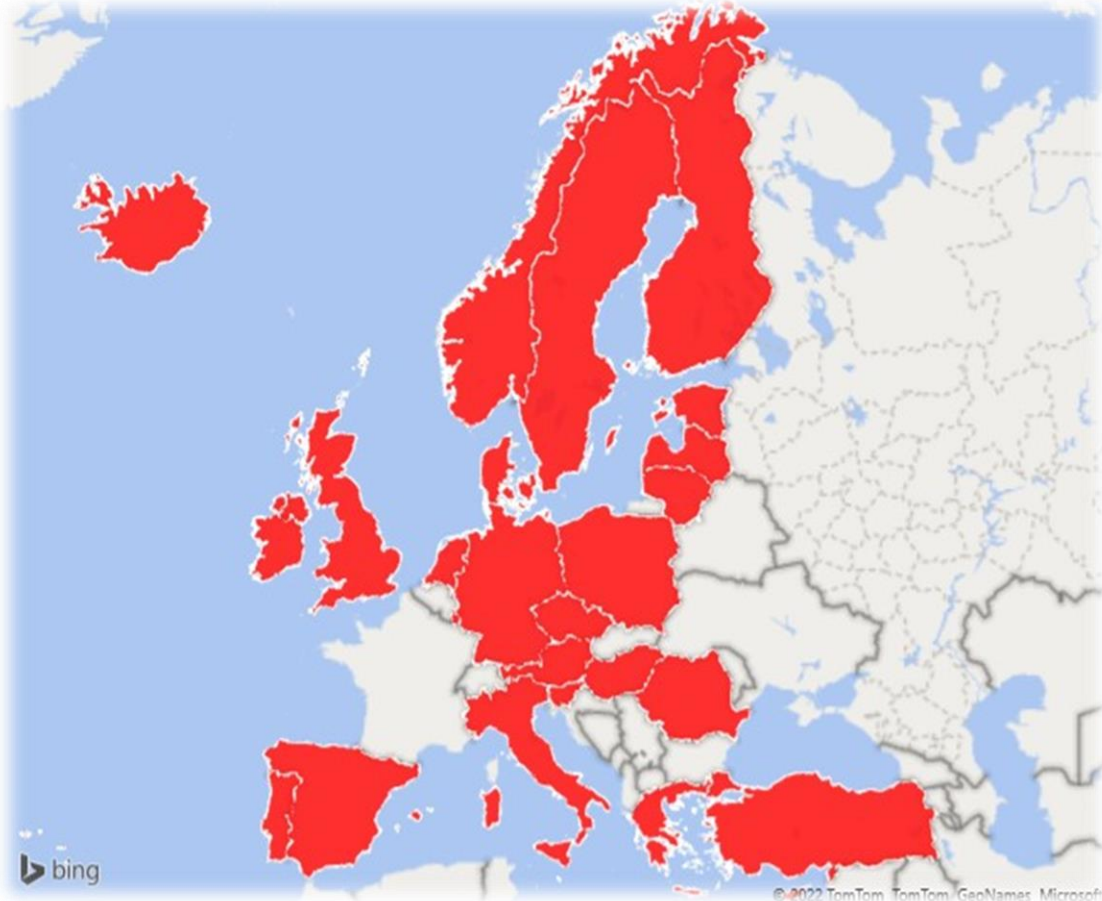
<sup>2</sup>European Association for Injury Prevention and Safety Promotion (EuroSafe-IDB Network), The Netherlands

<sup>3</sup>Luxembourg Institute of Health, Luxembourg

<sup>4</sup>Swansea College of Medicine, Health Data Research UK Wales and Northern Ireland, UK

<sup>5</sup>B2C Innovation, Italy

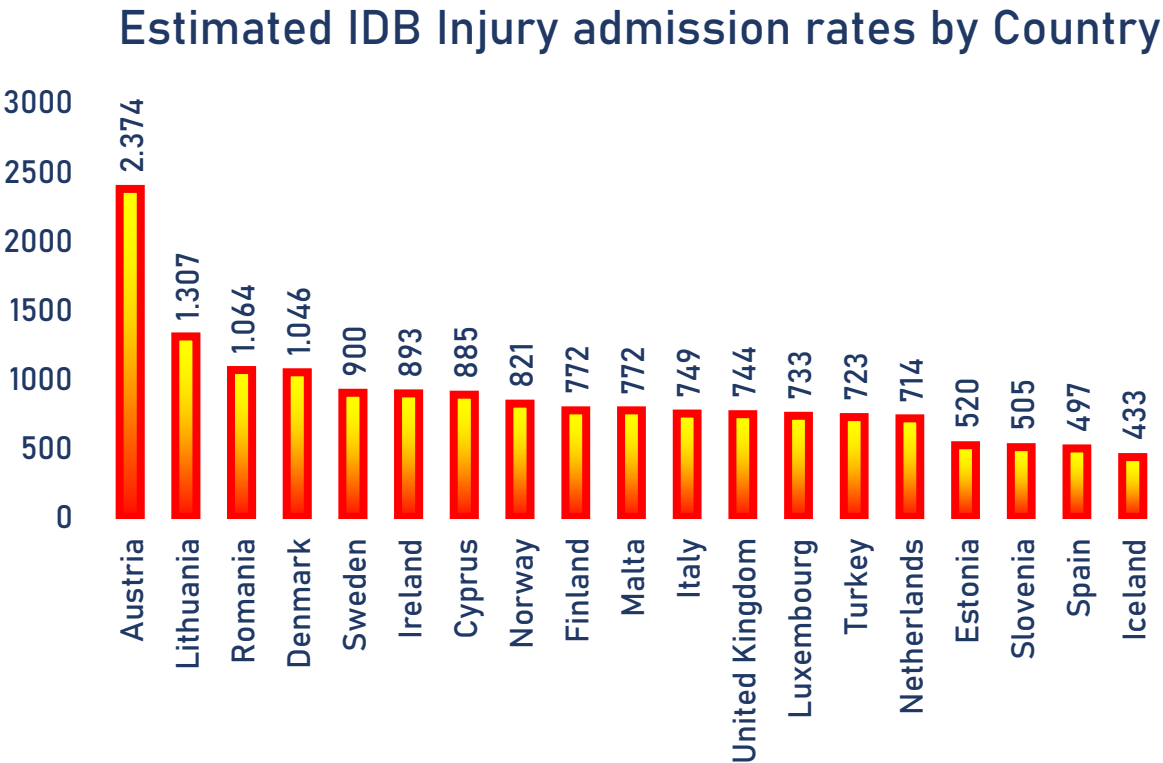
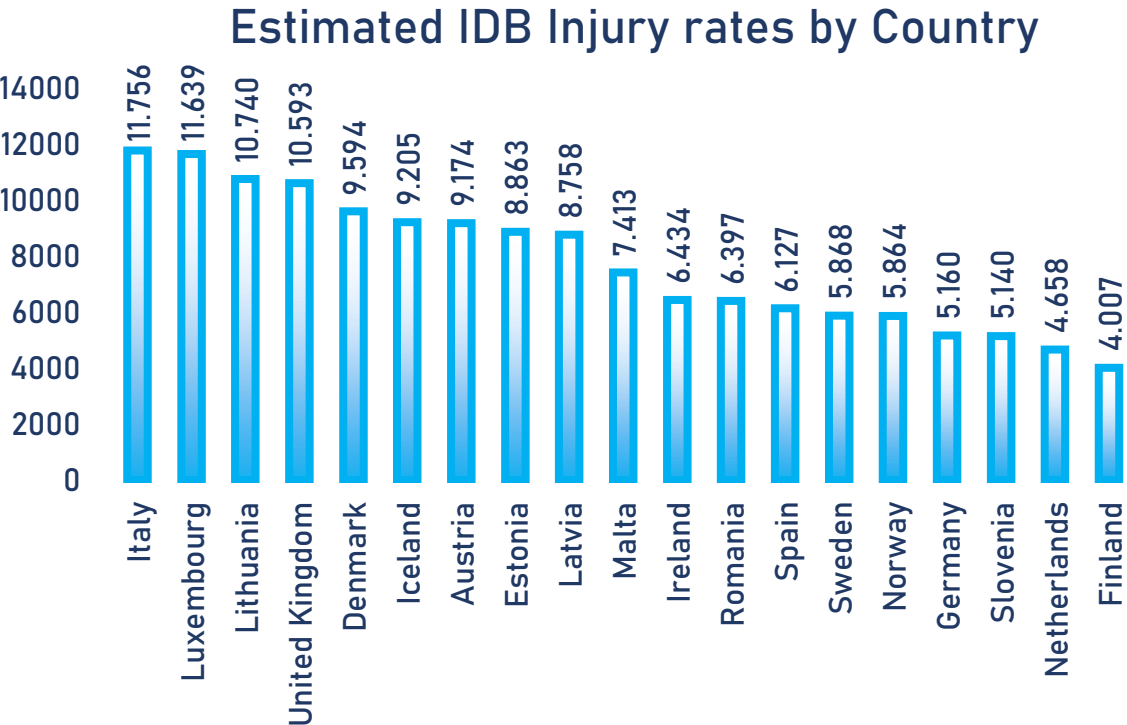
The EU IDB (European Injury Database) hosted by the Italian National Institute of Health (ISS) uses two data sets of different analytical detail: Full Data Set (IDB-FDS) and Minimum Dataset (IDB-MDS). The MDS includes about 12 million of attendances recorded in a sample of ED in 25 European countries between 2009 and 2019.



■ Inpatients ■ ED cases

The estimated injury rate is 7.948 (average years 2009-2019) for all IDB countries, which leads to an estimate of about 35.200.000 injury patients in Europe (55,6% males) that are treated in ED. Within these IDB-cases 13,2% were hospitalized as inpatients and 86,8% were ED admissions, which leads to estimate about 4.646.000 inpatients and 30.554.000 pure ED-cases in Europe.

Overall, there is an upward-trend of the rates over the period (+8,6%), however differences among years are more likely owed to the varying configuration of the sample of reporting countries over the period. People aged 15-24 years bear the highest injury rates (11.212), and middle-aged adults (25-64 years) the lowest (6.747). Home, leisure, and school accidents, hold by far the highest rate (5.485), followed by workplace (834), road transport (799), assault (254) and intentional self-harm (100).



IDB-MDS data show great differences by Country which are not only due to different injury morbidity. An important factor is the organisation of the national health care system, which results in different accessibility of secondary health care facilities. The ED based rates will be lower, if more injury patients are treated in primary health care facilities (e.g. in Finland and the Netherlands).