



# FCOS Factsheet on the study

April 2022

## Switzerland's statistics on occupational accidents by international comparison

### Background

On behalf of the Federal Coordination Commission for Occupational Safety (FCOS), the Institute for Competitiveness and Communication (ICC) of the University of Applied Sciences of Northwestern Switzerland has investigated the methods used to collect and report occupational accidents in various European countries. The aim of this is to be able to achieve a better comparison of the reported occupational accident figures between the different countries.

The project was prompted by the fact that in comparative statistics, occupational accident risk rates in Switzerland are often significantly higher than the European average. Given the wide range of prevention measures in Switzerland, questions were raised about the validity of the data material. The Federal Coordination Commission for Occupational Safety (FCOS) therefore wanted to find out how the available data material should be interpreted, and what any meaningful comparison would look like. This factsheet highlights the key findings of the study.

### Objectives of the study

- To carry out an in-depth analysis of the definitions and methodologies used in Switzerland and abroad for collecting and reporting occupational accidents and statistics compiled from them.
- To identify approaches for explaining the discrepancies in the data material on European occupational accident statistics.
- To put the occupational accident statistics of the different countries in context.

### Procedure

The study was divided into three modules: In Module 1, the relevant literature was analysed and the basic analysis categories and definitions of terms were identified. In Module 2, semi-structured interviews with international experts were conducted and analysed. Insights were gathered into the framework conditions and practices in different countries. In Module 3, the non-fatal occupational accident rates were modelled and made more comparable by means of a counterfactual simulation.

### The main findings of the study

- A direct comparison of the data material on fatal and non-fatal occurrence of occupational accidents is inconclusive. There are great differences between the reporting and recording procedures in the individual countries.
- The relatively high accident rates in Switzerland are largely due to:
  - the extensive and interlinked, insurance-based reporting and recording system for accident statistics in Switzerland.
  - needs-oriented incentives for reporting occupational accidents.
- A comparison of Swiss figures with countries that also have insurance-based reporting systems assesses Switzerland's non-fatal incidence rates as average.

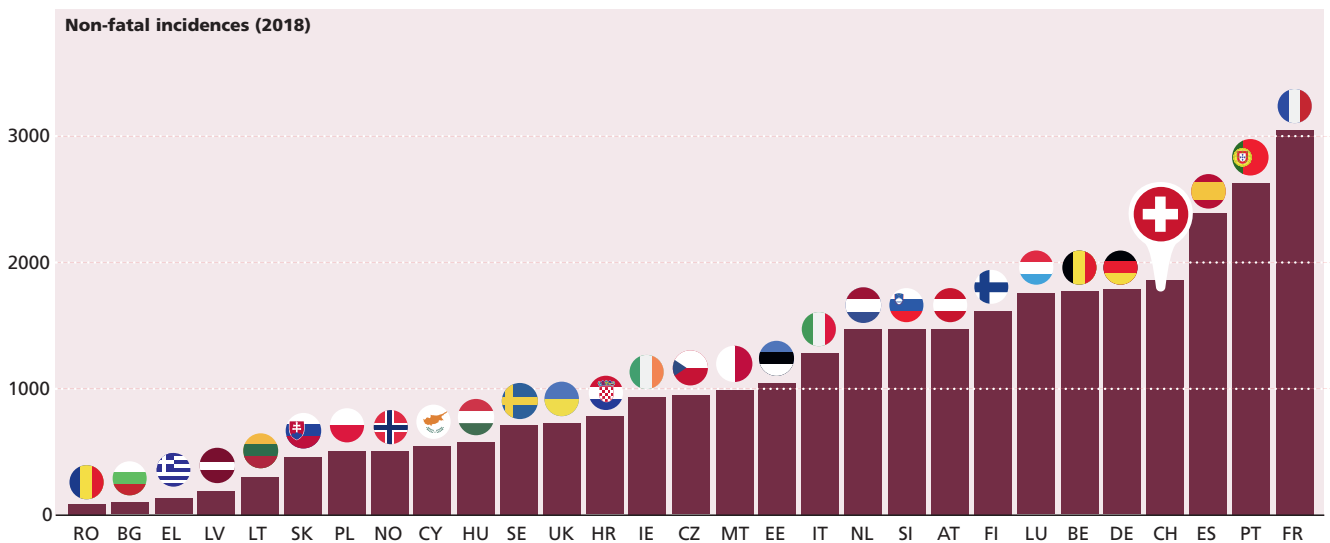
## The counterfactual simulation

As part of the study, a counterfactual simulation was carried out that assumes the insurance-based reporting system of Switzerland for all countries, as well as a shadow economy of the same magnitude. In the comparison of the 2018 figures for non-fatal incidences, Switzerland moves into the midfield of the countries under consideration.

The model supports the result from the descriptive evaluations, which indicates that, after adjusting these formal and informal differences, Switzerland shows «only» average values and not excessive values.

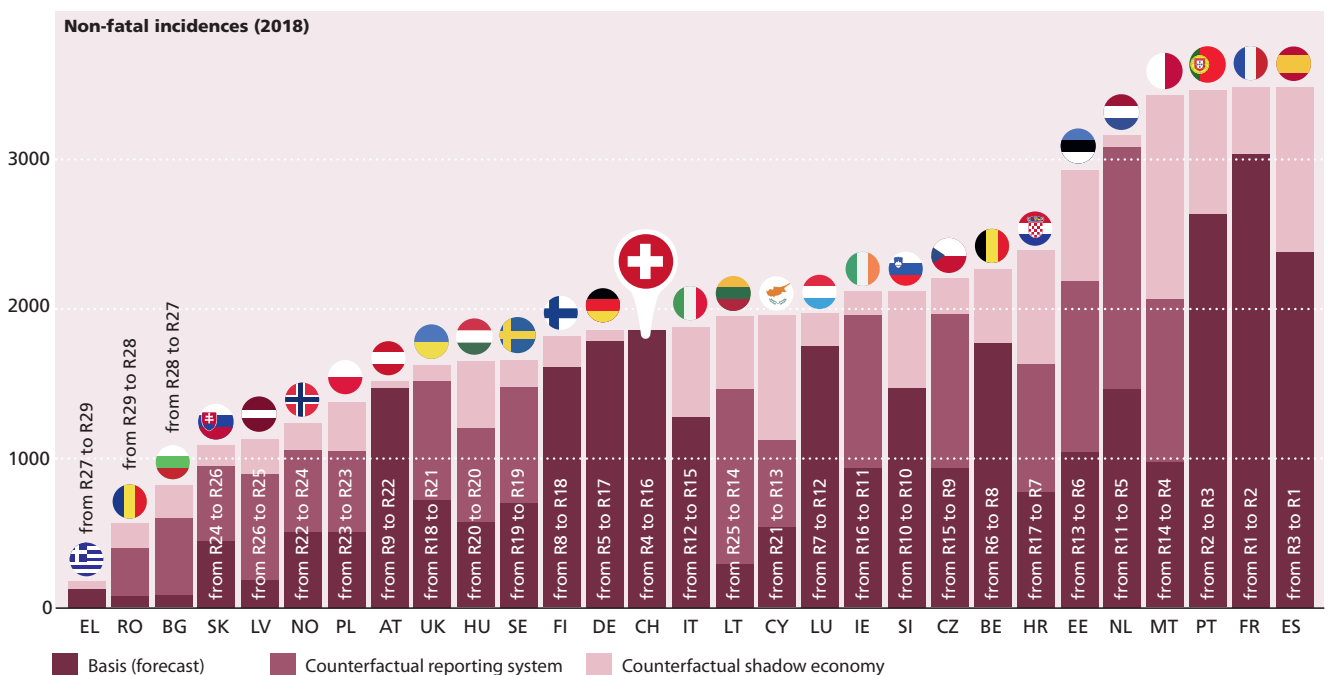
For most countries, the simulation results in values that can be considered to be properly comparable. However, for countries with low case numbers, such as Bulgaria or Romania, the figures are still unrealistically low due to their position at the extreme end of the distribution.

## Initial situation: Scores



## Scores according to the counterfactual simulation:

All reporting systems insurance-based, no under-reporting and shadow economy on a level with Switzerland, 2018, no random effects:



## Other findings

- Aside from the main objective of the study, it was found that
  - a growing GDP per capita in the primary sector causes occupational accident rates to rise disproportionately, while a growing GDP in the other sectors also has a significantly positive, but disproportionately low impact on occupational accident rates.
  - a growing GDP is also a driver of occupational accident rates, all other things being equal.
  - a higher proportion of employees aged 18 to 24 drives up occupational accident rates.
  - Micro-enterprises in the 0-9 employees size category have significantly higher occupational accident rates than other size categories. If an above-average number of micro-enterprises are active in a country, this drives up the occupational accident rates.

The study can be downloaded from [www.fcoss.ch/diversepublikationen](http://www.fcoss.ch/diversepublikationen).  
For further information, please contact the Federal FCOS office.

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