

Fatal and Nonfatal Construction Injuries in Selected Industrial Countries

In 2008, construction fatal injury rates among selected industrial countries ranged from 3.3 to 10.6 deaths per 100,000 workers (chart 37a). The reported construction fatality rate in the United States was relatively high, at 9.7 deaths per 100,000 *full-time equivalent workers* (FTEs, *see* Glossary) – only slightly lower than the rates for Spain and Italy, but nearly triple the rate for Norway.

In contrast, the nonfatal injury rate in the U.S. construction industry was relatively low compared to most selected countries, at 1.7 injuries per 100 FTEs in 2008 (chart 37b), which suggests nonfatal injuries may be underreported (*see* pages 38 and 41). In contrast, Switzerland had the second-lowest fatality rate, but a relatively high nonfatal injury rate.

The data reported here are from the International Labour Organization (ILO),¹ which compiles statistics on fatal and nonfatal occupational injuries provided by represented countries (chart 37c). Due to wide variability in data collection and reporting, comparisons across countries must be made with caution.

Except for Spain and the United States, most countries use insurance records as an information source. Spain uses social security records, while the U.S. collects data through the Census of Fatal Occupational Injuries and the Survey of Occupational Injuries and Illnesses (*see* page 38). Countries that base their data on insurance records include only insured employees in their calculations; some include all reported cases, while others include only events that result in compensation.

Inclusion of self-employed workers differs from country to country as well; Canada, Germany, Italy, Norway, and Sweden cover both wage-and-salary workers and self-employed workers, while Australia, Finland, Spain, and Switzerland exclude self-employed workers. The U.S. fatality data cover all workers, but self-employed workers are not included in the nonfatal injury data.

Another variable among injury rates is how the selected countries classify injuries from commuting accidents. Half of the

selected countries do not count workers' injuries from road traffic accidents as work-related if they are commuting; however, such injuries are counted as work-related by Finland, Germany, Italy, Spain, and Switzerland.

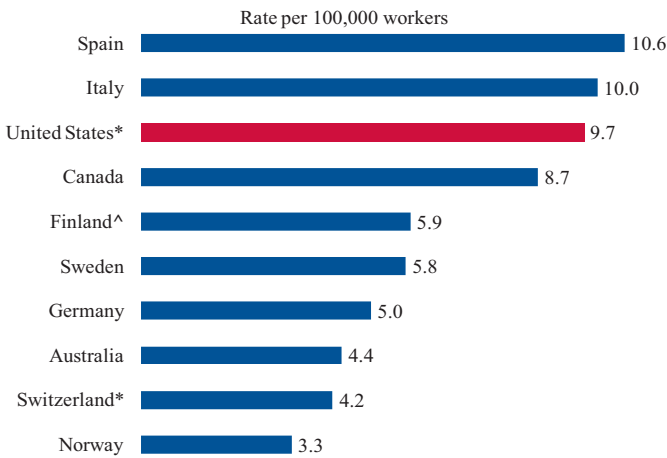
Countries also have different time periods for qualifying deaths and injuries as work-related: Spain and Switzerland count fatalities as work-related for deaths that occur within one year of the accident, while Australia uses three years as the cutoff point. Canada, Finland, Germany, Italy, Norway, Sweden, and the United States have no such limitation. Similarly, some countries only include injuries with a minimum period of incapacitation: in Australia, an injury is counted if a worker has been incapacitated for at least five workdays. The definition of lost-workday injuries also differs from country to country; for example, the minimum period is three days away from work in Italy and Switzerland, and one day in the U.S.

Some countries are more likely to have full-time employment with one employer (such as in Northern Europe), but in others, construction workers do not work full-time. Therefore, using FTEs allows construction sector data to be more comparable. However, only a few countries adjust injury rates using FTEs. In addition, countries such as Finland, Norway, Sweden, and Switzerland have a relatively small construction workforce. Thus, injury rates in those countries may be more variable.

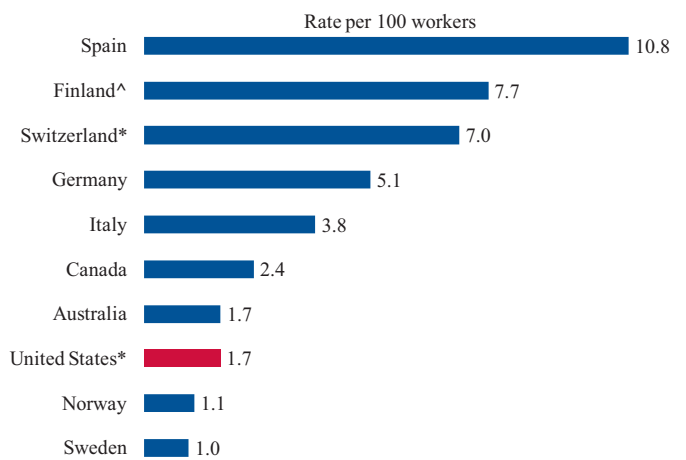
Changes in data classifications are yet another source of variability. The ILO asks the reporting agencies in each country to align their data with the International Standard Industrial Classification (ISIC) of all Economic Activities. Yet, the ISIC system has changed over time and not all countries adopt the latest version in the same year. The classification systems may be similar enough to allow general comparisons at a broad level, but the comparison may be limited within construction subsectors across countries and time periods.

1. International Labour Organization (ILO). <http://laborsta.ilo.org> (Accessed October 2012).

37a. Rate of fatalities in construction, selected countries, 2008



37b. Rate of nonfatal injuries in construction, selected countries, 2008



37c. Factors and criteria of construction fatalities and nonfatal injuries, selected countries, 2008

Country	Number of Deaths	Period for Qualifying Death as Work-Related	Number of Injuries	Period for Qualifying Injury as Work-Related	Includes Commuting	Includes Self-Employed	Source	Total Employment (in Thousands)	Hours Worked (per Week)
Australia	29	Within 3 years of accident	11,380	Incapacity of 5+ workdays	N	N	Insurance records	1,015	38.3
Canada	106	No maximum period	29,765	No minimum period	N	Y	Insurance records	1,320	37.1
Finland^	8	No maximum period	10,451	No minimum period	Y	N	Insurance records	183	38.5
Germany	127	No maximum period	127,384	No minimum period	Y	Y	Insurance records	2,521	39.0
Italy	189	No maximum period	74,645	Incapacity of 3+ workdays	Y	Y	Insurance records	1,970	36.6
Norway	6	No maximum period	2,051	No minimum period	N	Y	Insurance records	183	38.2
Spain	183	Within 1 year of accident	186,153	No minimum period	Y	N	Social security records	2,823	37.8
Sweden	17	No maximum period	2,936	No minimum period	Y	Y	Insurance records	306	38.8
Switzerland*	13	Within 1 year of accident	21,828	Incapacity of 3+ workdays	Y	N	Insurance records	272	41.1
United States*	975	No maximum period	120,240	Incapacity of 1+ workdays	N	Y/N**	Census/ Survey	12,140	38.5

Note: All charts - “^” denotes data for Finland are for 2007. Countries marked with an asterisk (*) (Switzerland and the United States) use FTEs to adjust rates. The construction industry in the U.S. is also coded by ISIC and excludes government employees. Thus, the numbers for the U.S. may not be comparable with the data coded by NAICS reported on other pages.
 Chart 37b - Rates are injuries with lost workdays for Australia, Italy, Switzerland, and the United States. Some countries, such as Canada, Finland, Germany, Norway, Spain, and Sweden, do not report injuries with days away from work separately; thus, rates are all nonfatal injuries for those countries.
 Chart 37a - Rates are defined as follows:
 1) Per 100,000 employees - Australia, Canada, Finland
 2) Per 100,000 workers insured - Italy, Spain, Switzerland
 3) Per 100,000 workers employed - Germany, Norway, Sweden, United States
 Chart 37b - Rates are defined as follows:
 1) Per 100 employees - Australia, Canada, Finland
 2) Per 100 workers insured - Italy, Spain, Switzerland
 3) Per 100 workers employed - Germany, Norway, Sweden
 4) Per 100 employees (200,000 hours worked) - United States
 Chart 37c - ** “Yes” for fatalities and “No” for injuries.