



WORK INJURIES IN CHILDREN AND YOUNG PEOPLE

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Standardized incidence of nonfatal work injuries resulting in more than three days of absence from work among employees under 18 and between 18 and 24 years of age per 100 000 employed persons in the same age group

KEY MESSAGE

⊕ Between 1995 and 2005, there were slightly decreasing trends in the standardized incidence of work injuries in employees under 18 and between 18 and 24 years of age. In most countries, this trend was more noticeable among the 18–24-year age group. Several countries reported relatively higher incidence in children under 18 years than that in young workers aged 18–24 years, and thus a few countries had relatively higher and more fluctuating rates than others. The relatively high incidence of workplace injuries (over 5000 per 100 000) in some countries indicates the need to protect children and young employees from workplace hazards.

EUROSTAT is the only publicly available international database presenting the incidence of work injuries in children and young people (1), but caution should be used in comparing directly between countries because the data reporting systems are not fully standardized. To enable international comparisons, occupational health surveillance and information systems should be standardized across the WHO European Region.

RATIONALE

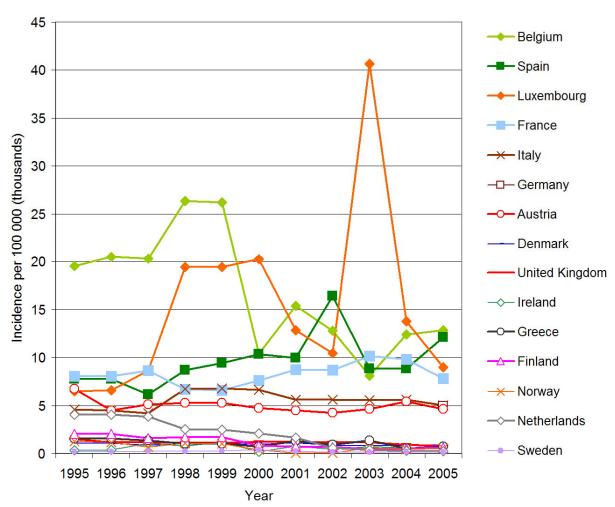
The effects of workplace hazards on the health and safety of children and young adults as well as on their physical, mental and intellectual development are different from those on adults. Young employees must be considered a specific risk group, and relevant measures must be taken to ensure their safety and health. The incidence of non-fatal work injuries among young people is an outcome indicator of health and safety, reflecting the quality of working conditions for these specific risk groups.

PRESENTATION OF DATA

Fig. 1 and 2 present the standardized incidence of non-fatal work injuries among children and young workers between 1995 and 2005 published by EU-ROSTAT (1). Fig. 1 covers 14 European Union (EU) countries and Norway, and Fig. 2 covers 15 EU countries and Norway. In Fig. 1, data for Germany has been newly added for 2005.

The incidence of non-fatal work injures is decreasing in the majority of countries. This trend was more noticeable for workers aged under 18 years in Belgium, Finland and the Netherlands, and for those aged 18–24 years, in Belgium, Finland, Greece, Italy and the Netherlands. For both age groups, incidence is higher and fluctuated more over the years in Belgium, France, Luxembourg and Spain than in other countries.

Fig. 1. Standardized incidence of work injuries among employees aged under 18 years, 1995–2005



Source: EUROSTAT (1).

12 Spain 10 France Luxembourg Incidence per 100 000 (thousands) -Portugal 8 Belgium Germany - Italy -Austria 6 Norway → Finland Denmark Netherlands Greece **United Kingdom** Ireland 2 Sweden 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 Year

Fig. 2. Standardized incidence of work injuries among employees aged 18–24 years, 1995–2005

Source: EUROSTAT (1).

HEALTH AND ENVIRONMENT CONTEXT

As of 2007, there are approximately 193 million workers in the EU. A little more than 20 million of these are young workers aged 15–24 years. Young workers run a higher risk of work injuries arising from lack of experience, immaturity or a limited awareness of existing or potential risks (2). Working methods, tools and equipment are normally designed for adults, and thus children and young adults are at a greater risk of fatigue, injury and accidents because of ill-fitting tools and safety equipment (3). A survey by the Labour Inspectorate of the Republic of Slovenia shows that among all the non-fatal injuries at work involving young employees, the most frequent injuries involve fingers (e.g. cuts and sprains), the second most frequent feet and ankles (e.g. sprains and objects falling on the feet) and the third most frequent the palms of the hands and the eyes (4).

Furthermore, improper handling of health and safety issues in many forms of temporary employment may result in higher injury rates among young workers, who tend to start their working life in temporary jobs. In Europe, 18–24-year-olds are at least 50% more likely to have a non-fatal workplace accident than older workers. The most hazardous workplaces are in the electricity, gas and construction industries (3).

In the long run, adverse health effects are more frequent and severe when exposure occurs during childhood, owing to the higher sensitivity of children's developing organs to toxic agents and other workplace hazards. Various diseases, including chronic musculoskeletal disorders, have serious implications for work-related diseases during the later working life. The incidence of work-related injuries among young people does not necessarily, therefore, reflect the long-term effect of workplace hazards

on the health of young workers (2,4). For these reasons, extra measures should be taken in policy and practice to protect children and younger workers from accidents and hazards at the workplace.

Child labour is a relatively underreported issue and there is a lack of reliable information about the number of child workers in the Region.

There are three forms of child labour (5).

- 1. The worst forms of child labour. The worst forms of child labour, as recognized by the International Labour Organization (ILO) Convention No. 182 (3), include: (a) slavery, trafficking of children, forced labour and child soldiers; (b) child prostitution and the use of children in pornography; (c) the involvement of children in illicit activities such as the production of and trafficking in illicit drugs; and (d) hazardous labour which, by its nature or the conditions in which it is carried out, is likely to harm the health, safety and morals of children. Unacceptable working conditions encompass activities whereby children are exposed to chemical agents, noxious fumes and other hazards occurring in coal mines, on farms and plantations and on construction sites (4). Although often supposed otherwise, the worst forms of child labour have far from disappeared from Europe (5).
- 2. "Voluntary" help in domestic settings or undocumented employment. The lack of data, linked to the underreporting of accidents and ill-health, for this form of child labour is a global problem. Children perform work that is regarded as "helping out" and is seldom recognized in official statistics. It is not known how many children are injured or suffer health problems as a result of work in domestic settings, seasonal jobs and street trading (5).
- 3. Inexperienced young workers aiming for personal satisfaction. Children themselves may choose to work as a measure of independence, mainly in seasonal and temporary jobs. This form of youth work may include a positive component by allowing children to gain experience of working life (5).

Child labour in all its forms can result in injuries and premature death as well as in loss of opportunities for education and social development (5).

POLICY RELEVANCE AND CONTEXT

Both the WHO Global Strategy on Occupational Health for All and the WHO global plan of action on workers' health 2008–2017 recognize child workers and young employees as high-risk groups and recommend the elimination of hazardous forms of labour (6,7). These resolutions urged Member States to establish specific programmes for occupational health and safety, paying particular attention to young workers. They also urged that aspects of workers' health should be taken into account in vocational training. Two other World Health Assembly resolutions and resolution RC55/R9 of the WHO Regional Committee for Europe put violence and injury prevention firmly on the health agenda.

Regional priority goal IV of the Children's Health and Environment Action Plan for Europe aims to reduce the risks of disease and disability arising from, among other things, hazardous working environments during pregnancy, childhood and adolescence, and emphasizes elimination of the worst forms of child labour (8).

ILO Convention No. 182 aims progressively to eliminate all forms of child labour that may be a risk to children's health, with priority given to eliminating without delay what are termed the worst forms of child labour. It has been ratified by 163 countries worldwide, including most countries in the European Region (3).

The EU has legislation and policies to protect young workers' rights to a safe working environment. The Community Strategy on Occupational Safety and Health is based on a preventive approach, which involves improving people's knowledge of work-related health risks through education, awareness and anticipation (9). The Strategy acknowledges the need for the commitment of both employers and employees. Implementation of the Strategy is promoted in the surrounding non-EU countries through the EU Neighbourhood Policy, which aims to strengthen and secure well-being in the EU's immediate neighbours (10). The Framework Directive on Health and Safety at Work (89/391/EEC) states that particularly sensitive risk groups must be protected against the dangers that specifically affect them (11). According to Directive (94/33/EC) on the protection of young people (12), employers are obliged to guarantee that work is not harmful to the safety, health or development of young people as a consequence of their lack of experience or awareness of existing or potential risks, or the fact that their

body systems are not yet fully mature. Vocational guidance or training programmes should be available.

The protection of children and young people at work requires health and safety promotional campaigns to raise the awareness of employers, young employees and their parents about occupational health hazards. These campaigns should be complemented by health education and training for the young people at work. There is a need to monitor the effectiveness of campaigns, legislation and enforcement.

ASSESSMENT

For the reporting period 1995-2005, a slight decrease was observed in the incidence of work injuries among children and young people. The trends were less obvious for work injuries in those aged under 18 years, although the trend was more noticeable in Belgium, Finland and the Netherlands. Countries reporting a relatively higher incidence in those under the age of 18 were more likely to report a higher incidence in those aged 18-24 years. This is an indication that a greater effort should be made to protect children and young workers from occupational hazards in the Region.

DATA UNDERLYING THE INDICATOR

Data source

EUROSTAT: standardized incidence of accidents at work by economic activity, severity and age (1).

Description of data

The EUROSTAT data on the incidence of working injuries are based on data collected under the European Statistics on Accidents at Work (ESAW) project.

Method of calculating the indicator

Standardized incidence of nonfatal work injuries resulting in more than three days of absence from work among employees under 18 and between 18 and 24 years of age per 100 000 employed persons in the same age group.

Computation: incidence = No. of non-fatal accidents divided by No. of employed persons in the studied population x 100 000.

Incidence was calculated in nine categories of the EU Classification of Economic Activities (NACE): agriculture, hunting and forestry; manufacturing; electricity, gas and water supply; construction; wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods; hotels and restaurants; transport, storage and communication; financial intermediation; and real estate, renting and business activities (12). A standardized number of accidents at work per 100 000 persons in employment was calculated per Member State by giving each category the same weight at national level as in the entire EU (standardized incidence) (13).

Geographical coverage

A total of 14 EU countries and Norway reported non-fatal work injury data for workers aged under 18 years, while 15 EU countries and Norway reported data for the group aged 18-24 years. For Portugal, the incidence for workers aged under 18 years was not reported to EUROSTAT and thus could not be presented here. The incidence data for Germany were newly added in 2005. Luxembourg data are not displayed in this fact sheet because of the possibility of statistical bias.

Period of coverage 1995-2005.

Frequency of update Annual.

Data quality

Only data on workers and workplace injuries collected within the ESAW project are included in this assessment. Because of the differences in health care systems and data collecting methods among countries, the data on non-fatal injuries are difficult to compare directly.

The variation in the standardized incidence of work injuries among reporting countries can be partially explained by the fact that children aged under 18 years change their jobs frequently, for example by working and studying.

Many young people under 18 years of age work occasionally either as trainees (as part of their studies or during holiday periods) or do occasional work for other reasons. Work injuries among temporary workers (such as seasonal workers) and regular workers are combined in data collection. The Labour Force Survey (LFS) in the United Kingdom does not, however, count temporary workers as employed persons (unless they happen to work during the week of the survey, which is not very likely). This results in a situation in which all work-related injuries for occasional and regular workers are counted, while the denominator includes only regularly employed persons. Young workers commuting from neighbouring countries may often be missed in the denominator also. These challenges in the workinjury surveillance system might have resulted in an overestimation of incidence in the countries with a greater number of temporary and migrant workers. For example, one third of the workforce in Luxembourg commutes daily from the neighbouring countries.

Suggestions for further monitoring

It is important to improve the monitoring of work injuries and the working conditions of young employees. The calculation should be based on the denominator of full-time equivalents. But for those aged 18 years and under, the LFS-based data will always remain biased, as the labour market situation among these young people changes many times during a year.

A pan-European information system on workers' health would be necessary to ensure reliable information on the health and safety of the working population, including children and young people. Such a system would support the identification of occupational health problems across the Region and the planning and monitoring of effective interventions to improve working conditions and prevent work injuries.

EUROSTAT work injury statistics cover several economic sectors, including the most hazardous occupations such as electricity, gas and construction work. Standardized incidence is aggregated, so no conclusion can be drawn about the differential effects of working conditions in the different economic sectors.

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FURTHER INFORMATION

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