Occupational health and safety risks for the most vulnerable workers

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Abstract
Each of the groups of workers studied – women, ageing workers, workers with disabilities, young workers, migrant workers, temporary workers and low-qualified workers – faces specific occupational health and safety risks. While the EU has a strong body of legislation and a comprehensive strategy addressing worker health and safety, further action could be taken to protect vulnerable groups. Options are proposed, drawing on the analysis of needs as well as a review of specific measures implemented in the Member States.
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LIST OF ABBREVIATIONS

CEEP European Centre of Employers and Enterprises
CLP Classification, labelling and packaging (of substances and mixtures)
ESAW European Statistics on Accidents at Work
ESF European Social Fund
ETUC European Trade Union Confederation
ETUI European Trade Union Institute
EU European Union
EU OSHA European Agency for Safety and Health at Work
Eurofound European Foundation for the Improvement of Living and Working Conditions
EWCO European Working Conditions Observatory
EWCS European Working Conditions Survey
HORECA The hotel, restaurant and catering sector
ILO International Labour Organisation
LFS Labour Force Survey (EU)
MSD Musculoskeletal Disorders
NIHL noise-induced hearing loss
OECD Organisation for Economic Co-operation and Development
OSH Occupational Safety and Health
OSHA Occupational Safety and Health Authority
REACH Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals
SME Small and Medium Enterprises
UEAPME European Association of Craft, Small and Medium-sized Enterprises
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EXECUTIVE SUMMARY

Occupational health and safety is one of the oldest and most advanced social policy areas of the European Union. Council Directive 89/391/EEC on the introduction of measures to encourage improvements in the safety and health of workers at work (also called the "Framework Directive") established minimum occupational safety and health requirements and stated that "particularly sensitive risk groups must be protected against the dangers which specifically affect them".

More recently, the Communication from the Commission on "Improving quality and productivity at work: Community strategy 2007-2012 on health and safety at work" recalled that "some categories of workers are still overexposed to occupational risks". The Strategy identifies several vulnerable groups that require specific attention, including women, young workers, workers whose jobs are insecure, older workers and migrant workers.

The world of work in Europe has evolved rapidly in recent decades in the face of several broad trends. Globalisation has been one of the forces behind the increase in the use of temporary and atypical contracts. Migration within and from outside the EU has lead to a rapid rise in the number of migrant workers in EU Member States. The number of women in the workforce has also increased. Demographic trends include an ageing of the overall EU population and, consequently, of the workforce.

Against this background, worker health and safety in Europe has improved in some aspects, notably with a decline in accidents over the past 15 years. Nonetheless, they remain high: more than 3% of EU workers suffered from accidents at work in 2007.

In the same year other work-related health problems – such as musculoskeletal disorders (MSDs) and psychosocial problems – affected more than 8% of Europeans who were either currently in employment or had worked until recently. As a result, an estimated 367 million working days were lost in 2007.

Estimates of the economic magnitude of both accidents and work-related health problems indicate that they represent an important burden on the EU economy: in Germany, for example, estimates in the last decade put the costs of occupational accidents and disease at between 1.7% and 3% of yearly GDP.

This study reviews occupational health and safety (OSH) issues concerning seven vulnerable categories of workers: female workers, workers with disabilities, ageing workers, young workers, migrant workers, temporary workers and low-qualified workers.

It analyses the occupational risks, health outcomes and policy context for each of the seven groups. It identifies current or recent initiatives in EU Member States and presents options for further action at EU level.

It can be noted that the seven categories have a variety of overlaps among them – for example, many migrant workers have temporary jobs. Indeed, many workers are not only vulnerable because of a single characteristic (e.g. their age) but also because this characteristic makes them more likely to also belong to other categories at risk.

WOMEN

The growing feminisation of the workforce means that greater attention is needed on the risk factors that affect female workers’ health and safety. In 2009, 58.6% of women aged 15-64 worked.
Of these, 43.7% worked in the non-market services sector (which includes education and health care) in comparison to only 18.3% of working men. Many OSH preventive policies have targeted “high-risk” sectors such as industry, agriculture and construction: these, however, have had little effect on the overall female working population.

Risk factors and health outcomes

Outside of risks during pregnancies and breastfeeding, there is little awareness about the effect of workplace hazards on female reproductive functions, such as menstruation, menopause, fertility and sexuality, yet evidence exists that the working environment as a whole (from occupational stress to exposure to heavy metals and shift work) negatively affects these functions.

Many risk factors faced by female workers are related to gender segregation. For example, women working in the non-market service sectors may face specific physical and psychosocial risks. It is often assumed that women carry out “lighter” tasks than men at work and therefore their physical efforts can be overlooked in risk assessments. However, work situations causing walking and standing (shop staff), lifting patients (nurses) or staying in awkward postures (cleaners) can lead to the development of musculoskeletal disorders. From a psychosocial point of view, interactions with third parties (parents, patients, customers) leading to potential confrontational situations are very common in the type of sectors and occupations where a majority of women are employed. This can be the source of frustration, stress, anxiety and even depression. Finally, the Fourth European Working Condition Survey shows that about 6% of women under 30 in the EU have reported sexual harassment at work (moreover, this level is believed to be an underestimate).

Women hold fewer managerial posts and have less autonomy in their jobs. Thirty percent have part-time positions, compared to less than 8% of men, which means that they are less likely to receive training, including on workers’ health and safety. Most women bear the main responsibility of household work and child care. The health risks from this non-paid work add up to the risks from their paid work.

Overall, women report fewer work-related accidents than men, but higher levels of other work-related health problems, including musculoskeletal disorders and stress. In addition, whereas the incidence rate of male accidents declines with age, in part because of better skills and a more cautious approach to work, the incidence rate remains approximately the same for women throughout their careers: this suggests that the causes of accidents for female workers are not as well identified and integrated into prevention policies.

Policy issues

OSH-specific legislation at the EU level targeting female workers has so far focused mainly on pregnant and breastfeeding workers. However, there is a need to ensure that factors affecting working women’s health throughout their lives are better taken into account and reported.

In the Member States, a broad range of initiatives focus on the health and safety of women at work and on sectors where women are strongly represented, such as health care. The measures implemented include OSH training targeting female workers, along with awareness raising and guidance on occupational health problems arising in female-dominated occupations.

Options at EU level to address the health and safety of women at work include:
- Adopting a holistic approach to female reproductive health, including on fertility, sexuality, menstrual disorders and menopause;
- Further research and monitoring of the effect on women’s health of the combined exposure to both paid work and unpaid work, such as housework, in view to develop guidance on this issue for occupational health services;
- Research on the causes and consequences of accidents at work for female workers in order to develop efficient prevention campaigns specifically targeting female workers;
- An enhanced focus on the psychosocial hazards linked to the frequent interactions of a majority of female workers with third parties, such as clients or call-centre customers;
- The inclusion of domestic workers within EU worker health and safety legislation (this option is discussed further under the section dedicated to migrant workers).

**AGEING WORKERS**

The EU working population is ageing. In 2025, 35% of the workforce is expected to be over 50. The health and safety of older workers will be a growing issue at EU level and in the Member States, with retaining a healthy and safe older population at work becoming a crucial economic success factor.

*Risk factors and health outcomes*

Ageing is associated with a natural deterioration of physical and mental capacities. Whatever risks ageing workers are exposed to through their occupations will be superimposed on this natural process. At the same time, workers gain experience and knowledge with age, factors that can help them manage risk.

Ageing workers report more work-related health problems than younger workers, with backache and muscular pain reported by more than 70% of workers aged 55 and more. This is not surprising, given that the main factor explaining the development of MSDs and other chronic health problems is the cumulative exposure to environmental risks (such as hazardous substances) and physical risks.

Avoiding the recurrence of health problems or the occurrence of disabilities is a key issue when seeking to retain older people at work. In that regard, questions of recovery time and return to work after illnesses are of major importance in the human resources management planning of a company.

With regard to occupational accidents, older workers are at lesser risk of non-fatal accidents because they have greater skills and experience; however, their accidents are more likely to be fatal than for younger workers. Data show a decreasing trend in occupational accidents throughout male workers’ lives, whereas this is not true for women, suggesting a lack of preventive strategies against accidents affecting mainly female workers.

*Policy issues*

The EU 2020 Strategy underlines that to achieve the goal of 75% of employment by 2020, the employment rate of workers aged 55-64 has to increase substantially. The 2007-2012 Community Strategy on health and safety at work identifies the promotion of healthy and safe workplaces as one of the main contributing factors to increasing the rate of employment of this age group.

In the Member States, actions to address the special issues related to older workers include awareness raising and projects to adapt work organisation to employees’ needs.
Options to address the health and safety of ageing workers at EU level include the following:

- Promotion of age management in enterprises, with the involvement of the social partners at EU level (e.g. through a framework agreement);
- Development of guidance on age management in SMEs;
- Research and awareness-raising on the issues affecting ageing women workers who also provide home care for relatives;
- Taking advantage of the European Year for Active Ageing in 2012 to raise awareness of health and safety issues concerning older workers and the benefits of the transfer of knowledge and skills among workers in different age groups for the benefit of all.

WORKERS WITH DISABILITIES

The issue of protecting the health and safety of workers with disabilities is central to the broader issue of increasing their participation in the workforce. Legislation and research have focused on how to accommodate people with disabilities at the workplace.

Risk factors and health outcomes

Workers with disabilities are a diverse group, and thus the health and safety issues they face vary greatly. Moreover, national definitions of disability differ among EU Member States.

The OSH risks associated to a certain job or task can be considerably different for workers with disabilities compared to other workers. The use of assistive technology to enable people with disabilities to work might present health risks, which should be carefully taken into account in risk assessments. In addition, workers with disabilities can be exposed to different risks than their non-disabled colleagues who are carrying out the same tasks, because of the alternative ways of performing their work that they might need to adopt.

Disability and age are often associated, as the prevalence of disability or impairment is highest among older people. The issues of recovery time and return to work after accidents or long-term illnesses, noted for ageing workers, are also important when seeking to increase the participation of workers with disabilities in the workforce.

In most EU countries, it appears that only a small share of people with disabilities of working age have employment. Workers with disabilities frequently face discrimination in the workplace, including lower salaries. Many workers with disabilities have low-skilled work and many have part-time contracts: both forms of work bring higher health and safety risks, including little autonomy in tasks and working time and more difficulties to access OSH trainings. EU-wide data on specific occupational health and safety risks faced by workers with disabilities are not available.

Policy issues

Directive 2000/78/EC on equal treatment in employment and occupation stipulates that reasonable accommodation must be provided by the employer for workers with disabilities. The mainstreaming of issues related to disability in EU policies has been an objective of the EU Disability Action Plan 2003-2010. The 2007-2012 Strategy on Health and Safety at Work in turn identifies the rehabilitation and reintegration of workers coming back from a long-term absence after an accident or an occupational illness or a disability as one of the four areas of focus for national efforts; the European Disability Strategy 2010-2020 also recalls such issue.

In the Member States, initiatives include OSH training for young people with disabilities as well as guidance for employers on the adaptation of workplaces.
Options at EU level to address the health and safety risks of workers with disabilities include the following:

- Further research and information exchange could support the European Disability Strategy’s objective to address health and safety at work: important areas include comparable statistical data on the health and safety risks suffered by workers with disabilities and impairments, including newly disabled workers returning to work;
- Emphasising the importance of an integrated approach to disability focusing on the two sides of OSH management, prevention and reintegration;
- Reviewing variations among Member States in their definitions of disability in light of the recent UN Convention and WHO’s International Classification of Functioning, Disability and Health, to make sure that the scope of the definitions adopted allows for successful OSH strategies;
- Dissemination of good practices on 'reasonable accommodation' integrating health and safety issues.

**YOUNG WORKERS**

Many young workers face conditions that can lead to work-related health problems. For this study, the category of young workers includes workers aged 15-24.

*Risk factors and health outcomes*

Younger workers have less experience and maturity in their job, which puts them at risk of overestimating their physical capacities or underestimating the safety and health risks associated with their tasks.

Young workers are overrepresented in some sectors, such as hotels and restaurants. They dominate certain occupations, such as hairdressers and call-centres, which are associated with specific OSH risks (in these examples, exposure to hazardous substances and psychosocial risks such as stress respectively).

A further concern is that exposure to workplace risks when young can contribute to the future development of occupational diseases. This factor is not, however, addressed in OSH surveillance or surveys. In addition, young workers are more likely to be employed under non-standard forms of contractual arrangements, such as temporary contracts, and the follow-up of temporary workers’ occupational health problems is particularly difficult.

Overall, young workers have a 40% higher rate of non-fatal injuries than older workers in all sectors. With regard to occupational diseases, an above average prevalence of acute diseases is observed among young workers, such as skin problems, headache and eye strain, infectious diseases and pulmonary disorders.

*Policy issues*

The 2007-2012 Strategy mentions young workers as a vulnerable category of workers and highlights that, although OSH policies are increasingly affected by the fact that the working population is ageing, young workers’ health and safety also deserve specific attention and dedicated policy measures.

Initiatives in the Member States have sought to raise the awareness of young people to workplace health and safety risks, including using new media such as the Internet. Some initiatives for specific types of workplaces, such as hotels and restaurants, will largely address young workers.
Options at EU level to improve the health and safety of young workers include:

- Development of tools such as educational programmes targeting students and measures raising awareness of OSH risks;
- Further support through the European Social Fund for initiatives and programmes promoting OSH training for young workers;
- Integrating worker health and safety issues in existing EU programmes for young people, such as the “Youth on the Move” flagship initiative under the EU2020 Strategy;
- Considering whether young workers over 18 deserve greater protection from exposure to harmful substances and harmful work processes, by extending existing legislation on workers under 18. In addition, further research into young workers’ subjective perception of their health would be valuable in developing future health and safety strategies;
- Including issues related to young workers in research and guidance on age management.

MIGRANT WORKERS

The migrant population in the EU Member States, legal and illegal, is growing. While a minority of migrant workers hold high-skilled jobs, many have jobs considered to be “dirty, dangerous and demanding”, in sectors such as agriculture, construction, health care or manufacturing.

Risk factors and health outcomes

Language and cultural barriers contribute to higher risks for migrant workers. Difficulties to understand occupational health and safety rules can put migrant workers in a dangerous situation. Cultural barriers include poor knowledge of the labour market: in addition to the fact that migrant workers can often be found in low skilled jobs, where working conditions are particularly hard, this means that they are often not aware of their rights.

The average migrant population is much younger than the average EU population. This means that migrant workers are on average younger, and thus many are exposed to risk factors associated with young age.

Migrant workers are very often employed under atypical forms of contract, especially temporary contracts, and are exposed to the risks linked to these forms of employment, such as less access to OSH trainings. Migrant workers are also reported to face worse working conditions than native workers in the same job, for instance working night shifts or week-ends.

Undocumented migrants are particularly at risk, although, because of their situation, reliable data are not available. The OSH situation of domestic workers, a great majority of whom are migrants and almost all of whom are women, is particularly difficult, as many of them are exposed to physical and psychosocial problems.

Working in hazardous jobs and sectors puts migrant workers at high risk of occupational accidents and diseases. While EU-wide statistics are not available, country studies indicate that migrant workers suffer higher levels of work-related disease and are at higher risk of accidents.
Policy issues

The 2007-2012 Strategy includes migrant workers in the list of workers overexposed to occupational risks and mentions “particularly dangerous” sectors in which migrant workers are overrepresented. Among the recommendations given for a better implementation of the 1989 Framework Directive, “distribution of information and guidelines written in simple language” will help migrant workers, who are more likely to have difficulties to understand complex OSH requirements in a foreign language.

Several Member States have sought to address safety and health for migrant workers through awareness raising and training, often adapted to their languages or using pictograms. The issues of greatest concern arise in those sectors that employ a high share of migrant workers and that have significant health and safety risks, such as agriculture and construction.

Options to improve the health and safety of migrant workers include:
- Improved enforcement of OSH legislation in high-risk sectors;
- Inclusion of domestic workers within the scope of EU OSH legislation;
- Promotion of the translation of OSH documents into major languages used by migrant workers, as well as the use of pictograms;
- Integration of OSH considerations in EU initiatives related to immigration, such as the European Agenda for the Integration of Third-Country Nationals and measures targeting undocumented third-country nationals.

TEMPORARY WORKERS

Atypical forms of employment, including fixed-term contracts, are becoming more common on the labour market. No particular gender differences appear here, as a similar share of women and men have temporary contracts.

Risk factors and health outcomes

Temporary workers face high occupational risks because of the type of sectors they work in and the type of tasks they have. Temporary contracts are particularly common in the construction and agricultural sector. Young workers are overrepresented among temporary workers, which means that the risks associated to young age apply also to a large share of temporary workers.

Temporary workers on average face more difficult working conditions (shift work, more hazardous tasks, etc.) and worse ergonomic conditions than permanent workers and, therefore, are at higher risk of developing musculoskeletal disorders and work-related health problems.

Some occupational diseases and disorders develop with time and exposure to risk factors. One issue for temporary workers is that potential health problems linked to a specific job can develop long after their contract has ended, making it more difficult in terms of recognition and compensation. This issue of latency of health problems is thus crucial.

Temporary workers have less access to training or to advantages such as bonuses or promotions and are less likely to be unionized. This can lead to a lower level of social and OSH protection than permanent workers experience. From a psychosocial point of view, job instability is inherent to these types of contract and can be a source of high stress levels, frustration and even depression.
Little statistical data is available on an EU-wide basis on the health and safety of fixed-term workers. National studies show that temporary workers, in particular temporary agency workers, face higher rates of accidents.

Policy issues

The EU has addressed the health and safety of temporary workers through Directive 91/383/EEC, which aims at ensuring that temporary workers enjoy the same level of protection as other workers, in particular with regard to protective personal equipment, training and information about occupational risks.

Specific Member States’ initiatives include training programmes targeting workers with atypical contractual arrangements through the spectrum of age, gender or sector. Safety passports recording workers’ past trainings are also an effective way of keeping track of workers’ status with regard to OSH trainings.

Options for further actions at EU level to address the health and safety of temporary workers include:

- Further attention to the long-term health surveillance of temporary workers: for example, this could be a topic to be covered by reports on the implementation of Directive 91/383/EEC;
- Further data and research on the conditions and health of temporary workers to extend the initial results of EU and national surveys indicating that these workers face worse conditions and higher OSH risks than permanent workers;
- Stressing enforcement of Directive 91/383/EEC, including by exchanges of good practices among national labour inspection authorities;
- Consideration of approaches to encourage and track OSH training for temporary workers, such as “passports” containing information on the training carried out by the worker in his or her previous positions.

LOW QUALIFIED WORKERS

Low-qualified workers are distributed throughout the other categories analysed in the study. Eurofound distinguishes between workers with low qualifications and jobs that require low skills: the latter are considerably more numerous, which means that many workers have jobs below their level of qualifications.

Risk factors and health outcomes

Low-qualified workers are found mainly in the manufacturing, wholesale and retail trades and agricultural sectors, where they often have elementary or high-risk occupations, which translates into higher rate of injuries and health-related problems in general. Studies have shown that low-qualified workers are much more exposed to all types of demanding physical activities than other workers.

Low-qualified workers have less autonomy, less responsibility and overall experience lower job satisfaction than workers with higher qualifications. Most low-qualified workers have low-paid jobs and non-standard forms of contractual agreements, meaning that they often suffer from job insecurity. All of these factors create stress and anxiety and have negative consequences on their health and lifestyle.

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1 Elementary occupations, as defined by the International Labour Organisation, are jobs consisting of simple and routine tasks which mainly require the use of hand-held tools and often some physical effort.
With regard to training, a large share of low-qualified workers has temporary contracts and therefore receives less OSH training than permanent workers. In addition, national studies have shown that low-qualified workers are less likely to attend training, whether because they are not offered the opportunity or because they show lower interest to participate. According to the 2005 European Working Conditions Survey, only 13% of low-qualified workers had participated in training provided by the employer over the past 12 months, compared to 30% of all workers.

Low-qualified workers face much higher rates of occupational accidents. According to the 2007 Labour Force Survey, 4% of men in elementary occupations suffered from an accident in the past 12 months, compared to 1.4% of men in highly-skilled non-manual work. The same survey reported that workers with low or intermediate education suffer from more work-related health problems than workers with high qualifications.

**Policy issues**

Raising workers' qualifications is a key EU objective. The Agenda for new skills and jobs, a flagship initiative within the EU2020 Strategy, calls for targeted approaches for several categories of workers, including those with low skills. However, few existing OSH actions or measures specifically target low-qualified workers. Nonetheless, many initiatives to address other categories of vulnerable workers (e.g. young workers, migrants, temporary workers) will indirectly benefit many low-qualified workers.

Options at EU level to improve the health and safety of low-qualified workers include:

- Efforts to improve the enforcement of OSH legislation in high risk sectors that use low-qualified workers extensively, such as agriculture;
- Expanding opportunities to integrate occupational health and safety issues into programmes targeted to low-qualified workers;
- Promotion of initiatives focusing on psychosocial risks in OSH programmes for low-qualified workers, as these can face higher levels of stress and other risks.

**CONCLUSIONS**

Attention to vulnerable workers is particularly important in light of major social and economic changes underway in Europe, including an ageing workforce, higher employment rates for women, greater numbers of migrant workers, and greater use of temporary contracts. Recent European policy initiatives provide a further impetus to address these groups: notably, the EU2020 Strategy calls for an increase in workforce participation over this decade, which implies greater participation of ageing workers and women.

This study shows, however, that the categories of vulnerable workers analysed face ongoing occupational safety and health risks that deserve further action at EU level.

**Overview of the options for further action at EU level**

Options for EU action can be identified across a range of policy instruments, including:

- Closing existing gaps in OSH legislation;
- Addressing vulnerable workers specifically in OSH strategies and raising awareness of the risks they face;
- Improving implementation and enforcement of OSH legislation;
- Expanding financial support for actions that address vulnerable groups, notably through the European Social Fund;
- Research and data gathering, as there are several important areas where further information and EU-wide data are needed.
Links to other policy areas

The importance of links between worker health and safety and other policy areas has been recognised in the Community Strategy 2007-2012, which calls for stronger policy coherence in particular with four areas: public health, regional development and social cohesion, public procurement, and employment and restructuring. The analysis of vulnerable groups of workers presented in this study reinforces this call and highlights a range of additional policy issues to be taken into consideration:

- Employment and retirement policies are extending years at work for ageing Europeans;
- Economic conditions and employment policies support greater labour market flexibility, leading to a growing use of temporary and other atypical contracts;
- OSH issues concerning migrant workers are closely affected by broader migration policies, including policies to integrate migrants as well as those for undocumented migrants;
- Educational programmes and other initiatives for young people provide an opportunity used by many Member States to increase this group's awareness of occupational health and safety issues;
- OSH and environmental policies also have strong links. For instance, the analysis has highlighted the vulnerability of certain categories of workers, in particular women, young workers and migrant workers, with regard to chemicals.
1 BACKGROUND INFORMATION

This study was commissioned by the Committee on Employment and Social Affairs (EMPL) of the European Parliament to gain better understanding of the occupational health and safety risks for the most vulnerable workers and the implications and interactions of these risks, in order to identify the need for possible EU legislative action or other measures.2

The specific aims of the study are to:

- Identify and describe the most vulnerable groups of workers, from the point of view of exposure to OSH risks (if applicable disclosed by sector of activity) and analyse the risks to which they are more exposed;
- Analyse the reasons explaining the increased exposure to risk of the different categories of vulnerable workers, with special focus on new and emerging risks related to new working environment, economic, social and demographic changes, which can have a higher incidence on vulnerable workers;
- Analyse proposed strategies and measures to prevent or reduce such exposure, having regard to the particular characteristics of the groups concerned;
- Consider the opportunities to modify the existing EU approach or legislation to cater for the special needs of these groups of vulnerable workers.

The terms of reference for the study identified the following groups of vulnerable workers:

- Women
- Ageing workers (55 and above)
- Workers with disabilities
- Young workers (18 to 24)
- Migrant workers
- Temporary workers
- Low-qualified workers.

This chapter provides a brief overview of EU legislation and policy related to occupational safety and health, in the context of the current socio-economic landscape. The following chapters review each of the groups of vulnerable workers in turn. The final chapter of the report provides conclusions and discusses possible options for EU action to address key problems.

1.1 EU legal and policy framework

Occupational health and safety is one of the most advanced social policy areas of the European Union. Improving the OSH conditions of workers in the Member States has been a central concern for the European institutions ever since the creation of the European Coal and Steel Community.3 Since then, the EU has built a solid body of legislation and has developed policy tools and programmes dedicated to improving the level of protection of workers’ safety and health.

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Following upon legislation that addressed specific workplace risks, such as asbestos\(^4\), in 1989 Council Directive 89/391/EEC on the introduction of measures to encourage improvements in the safety and health of workers at work (also called the “Framework Directive”\(^5\)) was adopted. This established minimum occupational safety and health requirements throughout the EU and for all sectors of activity, while allowing Member States to maintain or establish more stringent measures. A series of subsequent individual directives govern further specific issues related to safety and health at work. Some of these address questions related to the workplace itself or to types of work equipment.\(^6\)

Article 15 of the 1989 Framework Directive states that “particularly sensitive risk groups must be protected against the dangers which specifically affect them” but does not specify what the “sensitive risk groups” are. Nonetheless, directives adopted in the 1990s set specific provisions for several categories of workers, notably: pregnant workers and workers who have recently given birth or are breastfeeding,\(^7\) fixed-term and temporary workers,\(^8\) temporary agency workers\(^9\) and young people under 18.\(^10\)

In addition to this legislation, in its 1996 Guidance on Risk Assessment at Work\(^11\) the European Commission specifies that “sensitive risk groups” include staff with disabilities, young and old workers, pregnant women and nursing mothers, untrained or inexperienced staff (e.g. new recruits, seasonal and temporary workers, etc.), people working in confined or poorly ventilated spaces and maintenance workers.

The health and safety situation of workers is also determined by more general labour and anti-discrimination legislation, which directly impact on working conditions. For instance, Directive 2002/14/EC establishing a general framework for informing and consulting employees in the European Community provides for employers to inform workers when changes are made in the work organisation or in contractual relations. As we will see later in this report, these issues have strong links to workers’ health and safety and the obligation to inform workers on these issues ultimately improves workers’ well-being, including, but not exclusively, with regard to stress felt by individuals when they are not sufficiently informed on their working conditions and arrangements.

Directive 2000/78/EC establishing a general framework for equal treatment in employment and occupation (the Employment Equality Directive) prohibits discrimination on the grounds of religion or belief, disability, age or sexual orientation as regards employment and occupation. It ensures that workers are treated equally with regard to training, employment and working conditions.

\(^4\) Council Directive 83/477/EEC on the protection of workers from the risks related to exposure to asbestos at work
\(^7\) Council Directive 92/85/EEC of 19 October 1992 on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding (tenth individual Directive within the meaning of Article 16 (1) of Directive 89/391/EEC)
This Directive has clear relevance for several categories of vulnerable workers studied here, including women and workers with disabilities (Article 5 of the Directive provides for 'reasonable accommodation' for the latter).

In addition to Community legislation, health and safety has been the subject of framework agreements between European social partners. On 8 October 2004 a framework agreement on work-related stress was signed, which aimed to raise awareness and understanding of the problem and provide a framework for preventing or managing it. Its recommendations focus on better management and communication at the workplace, training for managers and staff and provision of information to workers. A framework agreement between social partners on harassment and violence at work was concluded on 26 April 2007; in this case recommendations include setting up clear procedures for reporting violence and harassment at work and establishing sanctions for perpetrators of such acts.

The 2007-2012 Community Strategy on Health and Safety at Work

The European Commission’s 2007 Communication on Improving quality and productivity at work: Community strategy 2007-2012 aims for a 25% reduction in the total incidence rate of accidents at work by 2012 in EU27 countries. It provides further detail on the topic of vulnerable workers, taking into account a 2004 report on the practical implementation of the provisions of the framework directive and five individual directives. The Communication also builds upon the previous European strategy on health and safety at work (2002-2006), which addressed the occupational health and safety risks to women at work not just through the spectrum of pregnancy or nursing but looking at the vulnerability of women with a broader scope.

The Communication states that 'some categories of workers are still overexposed to occupational risks (young workers, workers whose jobs are insecure, older workers and migrant workers)' and also that 'better account must be taken of those aspects of health and safety which specifically affect women'. In comparison with the 1996 Guidance Document mentioned above and the 2002-2006 Strategy, this current strategy identifies migrant workers as a category vulnerable to occupational health and safety risks. The gender perspective is also strengthened, as the strategy recognizes that inequality between men and women at the workplace is a factor of risk for all women at work.

The Strategy highlights new challenges in the field of health and safety at work, namely demographic change and the ageing of the working population; new employment trends (self-employment, outsourcing); new and larger flows of migrants towards Europe; and the increasing number of women on the job market. All of these new trends relate to categories of workers who can be considered vulnerable: ageing workers, workers under atypical forms of contractual arrangements, migrant workers and women. Although it is not identified as one of the main objectives of the Strategy, the idea of protecting vulnerable workers appears throughout the Strategy under different forms.

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1. The first objective of the Strategy is to guarantee the proper implementation of EU legislation. Supported by the Commission’s report on the practical implementation of Framework Directive 89/391/EEC\textsuperscript{17}, the Strategy acknowledges that there are still serious shortcomings in the implementation of EU legislation affecting in particular certain categories of workers (young people, workers on fixed-term contracts and low-skilled workers). Among the different measures proposed for improving the efficiency of the legal framework, better training and dissemination of information to the workers are essential tools. Increased involvement of labour inspectors and increased awareness on the difficulties associated with the working conditions of subcontractors and self-employed workers have also been identified as important goals.

2. The second objective of the Strategy encourages Member States to take better account of the social and demographic changes in their national strategies on health and safety at work, in particular with regard to the extensive integration of women and migrant workers into the labour market. The Strategy highlights the sensitive situation of young workers, towards whom OSH risk prevention could be neglected if attention is focused only on the ageing working population. Member States are also asked to pay attention to coherence between their different national policies. Public health and employment policies can affect particularly the health and safety of workers.

3. Raising awareness and promoting a culture of prevention of OSH risks among employers and workers is the third general objective of the Strategy. In addition to supporting enterprises, in particular SMEs, to invest in active prevention policies, Member States are encouraged to promote vocational training, especially in schools and at university level, as well as to invest in the training of young entrepreneurs on occupational risks.

4. The emergence of new and increasing risks constitutes the fourth element of the Strategy. Psychosocial problems, dangerous substances, nanotechnologies, reproductive health are all emerging issues that affect some workers more than others. Particular emphasis was given to the prevention of mental health problems, including stress from harassment, as well as the better integration of workers with mental disabilities.

5. The fifth element of the Strategy on the assessment of progress indirectly relates to the issue of vulnerable workers. Increasing the efficiency and coherence of national and EU level reporting systems for health and safety statistics, as well as developing a common system for the collection and exchange of information, will allow for more updated and complete statistical data on the health and safety of vulnerable workers, where important data gaps still exist. This in turn will help with the implementation of targeted preventive actions.

6. The sixth element of the Strategy relates to the promotion of higher OSH standards at the international level, following the EU’s commitment to the Decent Work Agenda of the International Labour Organization (ILO).

On 15 January 2008, the European Parliament adopted a resolution on the Community strategy 2007-2012 on health and safety at work.\textsuperscript{18} It started by recalling the beneficial effect of quality occupational health and safety standards on the economy and society as a whole.

\textsuperscript{17} European Commission, \textit{Communication on the practical implementation of the provisions of the Health and Safety at Work Directives 89/391, 89/654, 89/655, 89/656, 90/269 and 90/270}, as above.

It highlighted however that the decrease in the number of occupational accidents and work-related health problems has not affected the whole workforce equally and that certain categories of workers (namely migrants, workers with precarious contracts, women, younger and older workers) are at greater risk of occupational accidents and health problems.

Throughout its resolution, the Parliament mentioned specific issues that affect certain categories of workers more than others. These will be touched upon in the individual chapters devoted to each category of vulnerable workers. The Parliament also noted that national OSH strategies should focus on categories of vulnerable workers, listing six of the seven categories that are the focus of attention of this study (migrants, women, temporary, young and ageing workers, workers with disabilities). Finally, it pointed out that certain categories of workers (including temporary and part-time workers, women and migrants) should be offered tailored vocational training in the field of health and safety at work, in particular through the use of national and EU funds.

On 27 April 2011, the European Commission published its *Mid-term review of the European strategy 2007 – 2012 on health and safety at work*. In addition to considering the state of affairs with regard to the implementation of each of the six objectives of the Strategy, the mid-term review mentions that certain categories of workers (i.e. younger, older, migrant workers and workers with precarious jobs) are more affected by occupational risks than other categories. It also highlights the emergence of new trends such as demographic changes and changing work patterns, psychosocial problems such as work-related stress and the growth of atypical contractual relationships.

**The EU2020 Strategy and its initiatives**

The recent *EU2020 Strategy*, launched by the Commission on 3 March 2010, notes in particular the demographic changes in Europe as well as the EU’s low level of workforce participation in comparison with the US and Japan. The Strategy sets three priorities: smart growth, based on knowledge and innovation; sustainable growth that is more resource efficient; and inclusive growth, including a “high-employment economy”. The Strategy states that:

"...the employment rate of the population aged 20-64 should increase from the current 69% to at least 75%, including through the greater involvement of women, older workers and the better integration of migrants in the work force."

The Strategy has seven flagship initiatives, including “Youth on the move”, which promotes actions for a reduction in youth unemployment and for the facilitation of training.

Under the banner of inclusive growth, the initiative “An Agenda for new skills and jobs – A European contribution towards full employment” promotes “smart growth” through better functioning labour markets, a more skilled workforce and better policies for job creation and demand for labour. More importantly for our study, one of the four main objectives of the Agenda is the promotion for better job quality and working conditions.

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First of all, the Agenda acknowledges that, although the concept of flexicurity, promoting the combination of flexibility of job markets and strengthened security of workers’ social protection, has helped reduce the impact of the economic and job crisis, vulnerable groups of workers (in particular, young, temporary and migrant workers) have been more exposed to unemployment and bad working conditions. Future flexicurity policy priorities should therefore focus on adopting inter alia targeted approaches for vulnerable workers in the field of training and skills upgrading. The Agenda also defines the necessity to equip workers with better skills as a priority.

The most relevant part of the Agenda for our study is the one focusing on the improvement of the quality of work and of working conditions. Under this theme, the European Commission sets out key actions to be undertaken between 2011 and 2014, including the review of implementation of employment-related legislation (working time, posting of workers, fixed-term and part-time contracts directives) and of legislation on information and consultation of workers in view of the clarification, simplification and adaptation of EU legislation. This will be complemented with a comprehensive review of health and safety legislation and of the 2007 – 2012 Strategy and a proposal in 2011 for the follow-up 2013 – 2020 Strategy. The Commission’s review will focus particularly on the issue of exposure to electro-magnetic fields, carcinogens and mutagens and nanomaterials, as well as the development of legislation on MSDs.

In addition to legal and policy measures, the EU supports worker health and safety through financing. The Agenda specifically dedicates a paragraph on the financial instruments available for funding employment policy measures. It highlights the role of the European Social Fund (ESF) in supporting better health and safety at work. In the 2007-2013 spending cycle, 13 Member States have allocated resources from the European Social Fund for actions related to health and safety at work (these actions are part of broader measures, so the amounts going specifically to OSH are not available).22

The Employment guidelines for 2010 were adopted by the Council in October 2010 and subsequently confirmed for 2011. Guideline 7 emphasizes the need for better integration in the labour market of “young people, people with disabilities, legal migrants and other vulnerable groups” and also calls on Member States to promote occupational health and safety.23

1.2 The changing social and economic landscape

The world of work in Europe has evolved rapidly in recent decades, affected by global socio-economic trends. As reported by a study on New Forms of Physical and Psychosocial Health Risks at Work, published by the European Parliament, the global trends that have consequences on work organization and on the safety and health of workers include globalization, demographic trends, technological innovation and new risk perceptions, all of which have affected the European labour landscape.

Globalization has affected companies’ human resources management strategies, which, because they are now competing more directly with low-wage countries, have moved to non-traditional employment practices such as outsourcing, temporary work or part-time work. It also affects the type of jobs that are created in the EU.

Moving away from industrial mass production, European countries are developing towards a more knowledge-intensive, service-based society. Many new jobs involve working on more complex tasks. Technological innovation as well as the development of information and communication technologies means that workers are now dealing with more complex equipment. Flexibility and innovation have replaced size and costs as the main factors of success for companies. As a consequence, self-management and social skills have become indispensable working skills.

Figure 1 illustrates the evolution in employment sectors between 1997 and 2007. As can be seen, the proportion of workers in the services sectors has increased, while it has decreased substantially in the industry and agriculture and fishing sectors. The sharpest fall in employment rates between 1995 and 2002 in the EU15 took place in the mining sector, traditionally male-dominated, with a 22% decrease. At the same time, the health and social work sector, traditionally female-dominated, has experienced an 18% increase in employment.

Figure 1 Breakdown of employment by sector, EU27 (% of total employment)


Demographic changes such as decreasing fertility rates and higher life expectancy mean that the overall EU population, and inevitably therefore the working population, is ageing. An older working population has consequences in terms of OSH as older workers are more vulnerable to certain occupational risks (ageing workers are covered in section 3).

26 EU OSHA, New forms of contractual relationships and the implications for occupational safety and health, as above, p16
The EU has also seen a rapid increase in migrant workers, both between EU Member States (in particular with the accession to the EU of the new MS in 2004 and 2007) and from outside the EU. In 2008, an estimated 3.8 million people migrated to and between the EU27 Member States, 36% of whom were citizens from other Member States. A characteristic of this mobile population is that it is relatively young, the majority of migrants being between 20 and 40 years old.

Technology is part of the shift towards more complex, service-sector jobs. Moreover, information technology has become a key part of the workplace. Technological developments also include new substances, including nanomaterials, whose impacts on workers’ health are not well known.

As a result of these changes, workers face a range of new and emerging health and safety risks. These include: greater inactivity (e.g. from long hours sitting in front of a computer screen); higher job insecurity as well as increasing demands at work; and new dangerous substances. In addition, social and economic changes mean that the workforce is becoming more and more fragmented between very different categories of workers that do not fit the stereotypical image of the “standard worker” who used to be a middle-aged, medium-build, able-bodied, native language-speaking adult male who spends thirty years working in the same factory. As a result, it is important to analyse worker health and safety in terms of specific groups of workers, such as the most vulnerable.

### 1.3 Overview of the current health and safety situation in the EU

According to Eurostat data, in the EU27 in 2007, 3.2% of workers reported at least one accident at work over the previous 12 months. This corresponds to a total of 7.1 million workers out of the total EU workforce of 222.2 million (see Table 1 below). It should be noted however that the implementation of preventive strategies targeting specifically accidents at work has allowed these numbers to go down, in particular for men, over the past 5 years, as illustrated by Figure 2.
Just over 73% of these accidents result in sickness absences of more than one day, with 22% causing the affected workers to remain on sick leave for more than one month. In total, work-related accidents are estimated to have led to at least 83 million lost working days in 2007.\(^{33}\) Moreover, an additional 25,000 people across the EU-27 had to stop work altogether. According to Eurostat, every year 350,000 workers are forced to change jobs following an accident and 300,000 suffer permanent disability (of varying degrees).

**Table 1 Accidents at work in 2007 (% of the workforce)**

<table>
<thead>
<tr>
<th></th>
<th>Accidents at work (% of workers)</th>
<th>Share of accidents resulting in sick leave &gt; 1 day (%)</th>
<th>Share of accidents resulting in sick leave &gt; 1 month (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-27 Total</td>
<td>3.2</td>
<td>73.4</td>
<td>22.0</td>
</tr>
<tr>
<td>Men</td>
<td>4.0</td>
<td>77.1</td>
<td>23.4</td>
</tr>
<tr>
<td>Women</td>
<td>2.1</td>
<td>64.7</td>
<td>18.5</td>
</tr>
</tbody>
</table>

\(^*\) Data from IE not included because of wording differences.


In addition, in 2007 8.6% of workers aged 15 to 64 reported one or more health problems that were caused or made worse by work over the previous 12 months, corresponding to about 23 million people across the EU-27.\(^{34}\) Contrary to occupational accidents, the rate of reported work-related health problems has increased for all age groups and for both men and women between 1999 and 2007, as shown in Figure 3\(^{35}\), which compares data from 9 Member States.


\(^{34}\) Eurostat, *Health and Safety at Work in Europe (1999-2007)* – A statistical portrait, as above, p. 41

\(^{35}\) Note that data for both 1999 and 2007 are available for only nine Member States, and thus the 2007 level is lower than the figure for the EU as a whole.
Work-related health problems are estimated to have resulted in 367 million lost working days. The Labour Force Survey of 2007 showed that 61% of people with a work-related health problem identified musculoskeletal disorders as their most serious problem (53% according to the 1999 LFS survey), in comparison to 15% identifying stress, depression or anxiety as their most serious problem (see Table 2).

**Table 2 The most serious problems among workers that report work-related health problems, EU27 (%)**

<table>
<thead>
<tr>
<th>Type of work-related health problems</th>
<th>Working population with work-related health problems affected by this type of problem (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bone, joint or muscle problem which mainly affects back</td>
<td>29.5</td>
</tr>
<tr>
<td>Bone, joint or muscle problem which mainly affects neck, shoulders, arms or hands</td>
<td>20.1</td>
</tr>
<tr>
<td>Stress, depression or anxiety</td>
<td>14.5</td>
</tr>
<tr>
<td>Bone, joint or muscle problem which mainly affects hips, legs or feet</td>
<td>11.3</td>
</tr>
<tr>
<td>Breathing or lung problems</td>
<td>4.8</td>
</tr>
<tr>
<td>Heart disease or attack, or other problems in the circulatory system</td>
<td>3.8</td>
</tr>
<tr>
<td>Headache and/or eyestrain</td>
<td>4.9</td>
</tr>
<tr>
<td>Infectious disease (virus, bacteria or other type of infection)</td>
<td>3.1</td>
</tr>
<tr>
<td>Hearing problems</td>
<td>1.3</td>
</tr>
<tr>
<td>Skin problems</td>
<td>1.4</td>
</tr>
<tr>
<td>Other types of complaint</td>
<td>5.3</td>
</tr>
</tbody>
</table>


Musculo-skeletal disorders include three types of problems listed in the table: Bone, joint or muscle problem which mainly affects back; Bone, joint or muscle problem which mainly affects neck, shoulders, arms or hands; and Bone, joint or muscle problem which mainly affects hips, legs or feet.


Ibid., p. 43
The Eurostat data suggest that health problems not caused by accidents, for instance musculoskeletal disorders (MSDs), skin diseases, or stress, result in more absence from work than those caused by accidents. However, EU-wide statistical data on these issues are difficult to compile because the data on occupational diseases are not consistent between Member States, where systems of recognition can vary. Among others, the incidence rate of occupational cancer is one area where few data are available at the EU level.

Work-related health problems and occupational accidents are not only a major concern for society, as they affect millions of people, but they also represent a great economic cost to European businesses and social security systems.

Estimates of these costs in the 1990s presented figures that ranged from 1.2% of GDP to 5.1% of GDP for selected EU-15 Member States. In addition, Eurostat data on accidents suggest that these cost over 0.6% of EU GDP in 2000. In Germany, estimates of the costs of occupational health problems have varied from about 1.7% to about 3% of GDP. Musculoskeletal disorders alone represent a great share of these costs. Although, once again, no data are available at the EU level, some Member States (UK, Netherlands, Germany, Finland and Denmark) have estimated the cost of musculoskeletal disorders to their businesses and to society at between 0.5% and 2% of their GDP. Other studies have shown that, in the EU15, work-related stress costs businesses and governments about €20,000 million in absenteeism and related health costs alone.

Despite the lack of a common method, these studies show that occupational accidents and diseases are an important economic cost for the EU. And of course, they entail major costs and disruptions for workers themselves.

1.4 Vulnerable groups: Crossovers and definitions

This study focuses on seven groups that can be identified as potentially vulnerable: female workers, workers with disabilities, ageing workers, young workers, migrant workers, temporary workers and low-qualified workers.

These groups have a variety of overlaps – for example, many migrant workers have temporary jobs. Indeed, many workers are not only vulnerable because of a single characteristic (e.g. their age) but also because this characteristic makes them more likely to also belong to other categories at risk (e.g. young workers are more likely than their older counterparts to work in temporary jobs).

The crossovers between groups are summarised in Table 3. These are important to keep in mind in considering the data presented in this report, as some of the overlaps are important in numbers.

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42 European Commission, DG Employment and Social Affairs, *Second stage of consultation of the social partners on work-related musculoskeletal disorders*, 2007, p.3.
Table 3 Crossovers among the groups of vulnerable workers

<table>
<thead>
<tr>
<th>Ageing Workers</th>
<th>Young Workers</th>
<th>Workers with Disabilities</th>
<th>Migrant Workers</th>
<th>Temporary Workers</th>
<th>Low-qualified Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>37.8% of women aged 55-64 work</td>
<td>40.6% of women between 15 and 24 work</td>
<td>No information identified</td>
<td>Women migrant workers are often in low-skilled jobs</td>
<td>14.4% of female workers have fixed-term contracts</td>
<td>24% of female workers are low qualified</td>
</tr>
<tr>
<td>n.a.</td>
<td>The rate of disability increases with age</td>
<td>Fewer disabled workers are under 25</td>
<td>People over 60 are underrepresented among migrants</td>
<td>10% of workers over 55 have temporary contracts</td>
<td>36% of low-qualified workers are over 55</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A high share of migrant workers are young</td>
<td></td>
<td>Many young workers in low-skilled jobs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Some disabled workers have part-time and temporary contracts</td>
<td>Many disabled workers are more likely to have less qualifications</td>
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Moreover, some of the crossovers appear to be highly relevant in terms of OSH risks. These are indicated in bold in the table and include the following:

- Migrant female workers are more likely to have atypical contracts in low-skilled jobs, where the OSH risks are much higher;
- In general, migrant workers are often found in low-skilled jobs; and on temporary contracts;
- Ageing workers are more likely than younger workers to have a disability;
- A high share of young workers are on temporary contracts, where they may lack sufficient training in health and safety.

Definitions

Not all groups taken into consideration require definition (e.g. female workers). In some instances however it is useful to present definitions to make clear who is (or is not) included in a particular group. These definitions have been compiled using the most relevant elements of the different definitions used by EU institutions and organisations (EU OSHA, Eurofound, European Commission).

**Ageing workers:** for its statistical analysis, the European Working Conditions Survey (EWCS) divides the working population into four main age groups: 18-24, 25-39, 40-54 and 55-64. In this study, following practice in most EU reports, ageing workers are defined as workers aged 55 years and above.
Workers with disabilities: an EU definition of disability does not exist; even the Council Directive establishing the principle of equal rights in employment
does not define disability. However, the European Court of Justice, in the Navas case stated that in the framework of EU anti-discrimination legislation the concept of “disability” must be understood as referring to a limitation which results in particular from physical, mental or psychological impairments and which hinders the participation of the person concerned in professional life. In its definition, EU OSHA goes further and underlines that a disability can be a long-term process: “Disability covers both physical and mental impairments and covers all employees who might be hampered in work performance. This includes people with long term or progressive conditions as well as people with more stable disorders”. The definition of workers with disabilities is discussed further in section 4.

Younger workers: following EU OSHA’s definition, the study focuses on those in the age group 15–24 years. Young workers may take part of the world of work in different ways. Major sub-groups include trainees in vocational training schools or in companies; school pupils carrying out work experience; students working in their spare time (during holidays, weekends and evenings); and young workers who have left education and are starting their professional careers.

Migrant workers: as defined by EU OSHA, migrant workers can be either EU nationals staying in a EU27 country of which they are not citizens or people coming from third-countries, i.e. outside of the EU27. A further issue is that of undocumented migrant workers: here, studies and statistics are scarce, due to the very nature of the topic.

Temporary workers: a job may be considered temporary if employer and employee agree that its end is determined by objective conditions such as a specific date, the completion of a task or the return of another employee who has been temporarily replaced (usually stated in a work contract of limited duration). Common categories include: (a) persons with seasonal employment; (b) persons engaged by an agency or employment exchange and hired to a third party to perform a specific task (unless there is a written work contract of unlimited duration); (c) persons with specific training contracts.

Low-qualified workers: the European Foundation for the Improvement of Living and Working Conditions (Eurofound) makes a distinction between low-qualified workers, defined as workers who have basic educational levels – or, in other terms, who have not successfully completed three years of educational or vocational training after finishing compulsory education - and low-skilled workers, defined as workers in elementary occupations (i.e. jobs consisting of simple and routine tasks which mainly require the use of hand-held tools and often some physical effort).

45 ECJ, Case C-13/05, Sonia Chacón Navas v Eurest Colectividades SA, Judgment of the Court (Grand Chamber), 11 July 2006
50 ISCED 0-2 (0 = pre-primary education; 1 = primary education or first stage primary education; 2 = lower secondary or secondary stage of basic education).
52 ISCO 5-9 (5 = service workers and shop and market sales workers; 6 = skilled agricultural and fishery workers; 7 = craft and related trades workers; 8 = plant and machine operators and assemblers; 9 = elementary occupations.)
Most of the time, both groups fall under the category of “low-paid workers”. While the focus here is on low-qualified workers, it should be noted that 45% of the workers in low-skilled occupations have upper secondary education, meaning that they have qualifications for a better position than that they have been able to obtain.\textsuperscript{54} From an OSH point of view, this can lead to a feeling of frustration and eventually stress or even depression. Migrant workers are often in positions that are lower than their qualifications.

### 1.5 Methodology

**Sources and nature of statistical data**

This study presents statistical data from EU sources where available, and in particular from Eurostat and Eurofound. Most of the data on work-related accidents or health problems reflect the findings of different surveys, including the Labour Force Survey and the European Working Conditions Survey (EWCS). Whereas statistical data on the labour market are updated frequently (quarterly or monthly), surveys on worker health and safety are less frequent. The most recent Eurostat data are from a 2007 survey and the EWCS data used dates back to 2005. Some information from the 2010 EWCS was used but, as the analysis of the survey has not been completed by Eurofound itself, it could not be used as extensively as the 2005 version.\textsuperscript{55}

Specific information on the methods for collecting the data is found in the sources.

There may be some underlying statistical issues. Underreporting is one concern. Another is the “healthy worker effect”, by which statistical data and surveys on worker health and safety are biased because only healthy workers remain employed, while workers with serious health problems (including those due to workplace conditions) may take early retirement.

**Risk factors**

The following sections explore those possible occupational risks to which vulnerable groups are more likely to be exposed than the general working population. These risks are classified as either endogenous or exogenous. Endogenous risks are those to which members of the group in question are exposed by virtue of their inherent characteristics (such as women tending to be less strong than men). Exogenous factors are those to which members of the group are likely to be exposed because of the nature or type of work they are more likely to be involved in.

To some extent, the two categories are linked. For instance, in statistics, women present a lot of health issues because they are likely to work in sectors such as health care, exposing them to MSDs or stress-related problems. But some of these health problems, such as MSDs, come from the inherent mismatch between their strength and the physical demands involved, for example, in patient handling. The distinctions between endogenous and exogenous risks are not always clear-cut.

\textsuperscript{54} T. Ward, et co., Eurofound, \textit{Low qualified workers in Europe}, as above, p26

\textsuperscript{55} Special acknowledgment to Ms Sophie MacGoris from Eurofound for her valuable support in providing statistical data from the 2005 EWCS as well as to Mr Bart De Norre from Eurostat for providing support with the Labour Force Survey data.
Review of measures implemented at national level

This study identified relevant initiatives at national level to address groups of vulnerable workers. This was done through a review of recent EU reports (by EU OSHA, Eurofound and others), as well as via stakeholder interviews.

Although a broad range of initiatives has been identified, their geographic distribution is not balanced. In particular, the reports that were used as the main sources contain less information on initiatives in the newer Member States than for established Members.
2 WOMEN

KEY FINDINGS

- Many occupational health and safety risks for women are linked to their reproductive functions. Other risks factors faced by female workers are often related to gender segregation. A high share of women work in the non-market service sectors such as education, health and social work, where they face specific risks. Women hold fewer managerial posts; many have part-time positions and are less likely to receive training, including on worker health and safety.

- While women on average have less physically demanding jobs, many carry out repetitive tasks that are related to specific health risks.

- Most women in the EU bear the main responsibility of household work and child care. The health risks from this non-paid work add up to the risks from their paid work; this double burden in general is not, however, considered when addressing occupational health problems faced by women.

- In surveys, about 6% of women under 30 in the EU have reported sexual harassment at work (though this may be an under-estimate).

- Overall, women report fewer work-related accidents than men, but higher levels of work-related health problems, including MSDs and stress.

- In the EU Member States, a broad range of initiatives focus on the health and safety of women at work and on sectors where women are strongly represented, such as health care.

- Further EU action could address key issues. Additional research is needed on the effect of work on female reproductive health, on the links between workplace and other risks factors for women, and on addressing psychosocial risks faced by female workers. It will be valuable to consider including domestic workers in EU occupational health and safety legislation.

2.1 Overview and socio-economic trends

Based on 2010 Eurostat data, women are under-represented in the work force. They account for 51.6% of the EU population aged 15 and older (working age population), but only 45.4% of workers and while the employment rate of men in the EU27 was 70.1% in 2009, the employment rate of women was only 58.2%. However, the increasing feminisation of the workforce in the EU – the employment rate for women was at 53.7% in 2000 – means that issues concerning only or mostly working women are affecting a larger part of the population today than they did only a few years ago.

Having children has a key influence on the role of women in the workplace. An EU-OSHA review on “Gender issues in safety and health at work” reported that, in 2000, only 59% of women aged 20-59 who had children under the age of 6 worked (compared to 72% of women who did not have children and 89% of men who had children).

Moreover, women account for a high proportion of part-time workers. In 2009, 79.2% out of 34.5 million of part-time employees were women, compared to only 40.1% out of the 147.2 million full-time employees.\textsuperscript{58}

From a sectoral point of view, the most distinctive feature of the female working population with regard to their male counterparts is the fact that almost half is active in non-market services (43.7% in 2009, compared to only 18.3% of men). According to Eurostat’s classification, this composite category includes community, social and personal service activities as well as private households with employed persons.\textsuperscript{59} Combining market services and non-market services, 82.5% of female workers were employed in the services sector in 2009\textsuperscript{60}. As OSH prevention policies have traditionally focused on high-risk sectors for men, such as construction and agriculture, they have had little effect on the occupational health and safety of women.

### 2.2 Risk factors

#### Summary Table

<table>
<thead>
<tr>
<th>Endogenous Risk Factors</th>
<th>Pregnancy; Breastfeeding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Menstrual disorders; Menopause</td>
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<td></td>
<td>Physically less strong</td>
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<tr>
<td>Exogenous Risk Factors</td>
<td>Childcare; House care</td>
</tr>
<tr>
<td></td>
<td>Part-time jobs; Precarious contracts</td>
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<tr>
<td></td>
<td>Discrimination: lower pay, fewer responsibilities</td>
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<td></td>
<td>Prevalence in “nursing” jobs</td>
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</table>

#### Endogenous risk factors

The main endogenous factors which put female workers at higher risks of developing work-related health problems or of suffering from occupational accidents are associated to women’s biological differences with men, particularly with regard to their reproductive and sexual functions and to their physical strength.

Pregnancies and breastfeeding, menstruation, menopause, fertility and sexual and reproductive functioning are relevant factors in the occupational safety and health of female workers.\textsuperscript{61} Poor working conditions can contribute to a range of health issues for women associated with pregnancy and the period after giving birth, including tiredness and fatigue, pain and discomfort, back problems, postural problems, swollen legs, nausea, blood pressure changes and stress.\textsuperscript{62}

Health risks such as these to pregnant workers and workers who are breastfeeding have been addressed in Directive 92/85/EEC and the additional guidelines on risk assessment.\textsuperscript{63} This does not mean that these risks do not exist anymore but, if the legislation and the guidelines were fully implemented, they would be substantially lower.

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\textsuperscript{59} It also includes extra-territorial organisations and bodies. Significant variance exists, with figures as low as 21.2% in Romania or nearing 55% in countries such as Denmark.
\textsuperscript{61} EU OSHA, Gender issues in safety and health at work – A Review, as above, p79
\textsuperscript{62} Ibid., p79-80
\textsuperscript{63} European Commission, Communication on the Guidelines on the assessment of the chemical, physical and biological agents and industrial processes considered hazardous for the safety or health of pregnant workers and workers who have recently given birth or are breastfeeding, COM(2000)466, 5 October 2000, Brussels.
Occupational health and safety risks for the most vulnerable workers

Notably, Article 6 of Directive 92/85/EEC states that pregnant workers and workers who are breastfeeding “may under no circumstances be obliged to perform duties for which the assessment has revealed a risk of exposure, which would jeopardize safety or health, to the agents and working conditions listed in Annex II”. This includes exposure to physical agents such as work in hyperbaric atmosphere, biological agents such as toxoplasma or the rubella virus, and chemical agents such as lead and lead derivatives that are capable of being absorbed by the human organism.

While EU legislation provides important protection, risk factors for pregnant workers remain, due to at least two reasons. The first one is that women often declare their pregnancies to their employer between the 7th and the 10th weeks. However, available data show that the greatest risks of foetal malformation or miscarriages lie between the 3rd and 8th week of gestation, meaning that measures to prevent exposure to mutagens or reprotoxins will come in too late for a majority of women. The second issue is that the directive does not prohibit pregnant and breastfeeding workers to work under dangerous circumstances, but prohibits the employer to force pregnant and breastfeeding workers to work under these circumstances. This implies that the responsibility falls onto the worker, who, because of financial or other pressures, might choose to continue to perform such tasks.

In contrast to the risks to pregnant workers, the occupational risks that can cause menstrual disorders, such as occupational stress, exposure to heavy metals or solvents or exposure to environmental noise and hot and cold conditions, as well as the effect of shift work, in particular night shifts on the menstrual cycle, have not been carefully researched or at all addressed in the legislation. Similarly, the effect of the menopause on the health of female workers, although a crucial topic for ageing female workers, has been overlooked by researchers and legislators. In addition, the fact that work can increase difficulties in coping with either menstrual or menopausal syndromes (which include tiredness, occupational stress and anxiety, headaches and migraines, etc.) should be taken into account.

With regard to physical characteristics, women are on average smaller and less physically strong than men, though both women and men have a great range in terms of these characteristics. Nonetheless, these average differences mean that women tend to occupy positions which are seemingly less physically demanding and only a minority of women work in sectors such as construction (where 9% of workers are women) or mining and extraction (16%) At the same time, historical gender exclusions in such industries have also had a major influence.

In terms of health and safety, the differences in sectors and jobs mean that women are at a lower risk with regards to certain occupational hazards, for instance vibration and noise. Nonetheless, although it is often assumed that women therefore carry out “lighter” tasks than men or that their work is consequently physically less “strenuous”, studies have shown that these “light” tasks can include very physical activities, such as lifting heavy loads, maintaining awkward postures, or performing highly repetitive movements.

64 Mengeot M-A, Vogel L., Production and reproduction – Stealing the health of future generations, ETUI-REHS, aisbl, 2008, p50
65 Ibid., p51
67 EU OSHA, Gender issues in safety and health at work – A Review, 2003, as above, p81-82
68 Ibid., p84
69 Ibid., p190
70 EU OSHA, OSH in figures: Work-related musculoskeletal disorders in the EU — Facts and figures, European Risk Observatory Report, Luxembourg, 2010, p154
Moreover, many women face difficult movements including lifting patients (nurses), lifting heavy folders or boxes of paper (clerks, secretaries), scrubbing floors (cleaners), awkward postures (cleaners, agricultural workers), repetitive hand and arm movements (assembly line workers) and prolonged walking and standing (shop staff). The health outcomes of these physical efforts can include accidents and musculoskeletal disorders (MSDs).

**Exogenous Risk Factors**

The EU OSHA report on “Gender issues in safety and health at work” shows that the distinctive patterns of exposure of women to occupational hazards arise from two main factors: 71

- gender segregation in employment
- gender segregation with regards to domestic responsibilities

**Gender segregation in employment**

Gender segregation in employment has two aspects: horizontal segregation, meaning that women and men do not work in the same sectors, and vertical segregation whereby, within the same sector, women and men do not hold the same type of positions72.

In 2009, 82.5% of women worked in the services sector. They are particularly overrepresented in care-related activities.73 Female workers dominate the health sector (79% of workers are women), education (72%) and, to a lower extent, the wholesale and retail trade (55%).74 As listed by EU OSHA, the type of employment areas were women are mostly found include, “clerks and secretaries, teachers, shop sales workers, cooks, catering assistants and waitresses, nurses and care assistants, textile machine operators, food processing jobs, fine assembly work, hairdressers and beauticians, cleaners and domestic workers”.

Vertical segregation results in fewer women in managerial positions. For social and historical reasons, women do not hold the same positions as men, even in the same sector. They do not perform the same kind of tasks and they are not given the same responsibilities. Women are often found in positions that are less well paid, where they work fewer hours and which are hierarchically lower than men. As an illustration, 63% of the workforce has a man as their immediate supervisor and only 21% has a woman75.

Because women often find themselves in less rewarding jobs (not only in financial terms but also in terms of career prospects), women can sometimes become frustrated. Jobs such as these are often repetitive and monotonous. Workers (predominantly female) in such lower-grade jobs are often subject to pressures imposed by someone else and they lack personal control and autonomy over their tasks. This often means that they cannot decide their pace of work, the order of their tasks, when they want to take breaks, or the scheduling of holidays76.

Even when they have the same jobs, men and women tend not to perform the same tasks. For instance female cleaners are more likely to be responsible for emptying bins while men are responsible for sweeping. This can have consequences for the posture they adopt most of the day, which, in turn, can cause health problems77.

71 EU OSHA, *Gender issues in safety and health at work – A Review*, 2003, as above, p131
72 Ibid., p32
73 Ibid., p188
75 EU OSHA, *Gender issues in safety and health at work – A Review*, 2003, as above, p33
76 Ibid., p213
77 Ibid., p34
Female workers dominate the clerical and secretarial work sector. These sedentary occupations involve a high level of physical inactivity, whether sitting or standing, which can be associated with health problems such as coronary heart diseases, certain types of cancer and an increased prevalence of musculoskeletal disorders in the neck, the shoulders, the upper and lower back.\textsuperscript{78}

With regard to new and emerging risks, the increased participation of women in the workforce has increased their exposure to hazardous substances, especially carcinogenic, mutagenic and reprotoxic substances (e.g. from working with electronic components). Although between 1995 and 2002 there has been a 13.7% increase in the incidence rate for cancer in women, the occupational causes of these cancers have not been well-evaluated and, based on 1970’s research, it is believed that only 1% of cancer in women can be attributed to occupational factors. The emergence of new chemical risks, including nanomaterials, has potential implications for women’s health and will need to be assessed.\textsuperscript{79}

A very contemporary example of a sector dominated by women, where psychosocial risks are very important, is work in call-centres. The mix of low responsibilities and total lack of control over their job (scripted work), potentially accompanied by constant confrontation with angry customers, creates strong feelings of frustration, emotional exhaustion and disillusionment.\textsuperscript{80}

Being more represented in certain jobs where interactions with third-parties form a major part, if not all, of their tasks, such as healthcare, education and the retail trade, women are very often exposed to a certain type of violence at work, whether internal (from colleagues or superiors) or external. As reported in the Fourth European Working Condition Survey (EWCS), “workers in the health sector are eight times more likely to have experienced the threat of physical violence than workers in the manufacturing sector”.\textsuperscript{81} Violence from third parties, such as clients, customers or patients, is a serious issue that affects a lot of working women. In the healthcare sector, women are confronted to the violence of patients and relatives, while in the education sector workers face violence from students and parents.

Young women are particularly vulnerable to unwanted sexual attentions, especially in the hotel and restaurant sector. In 2005, 6% of female workers under 30 – and 2% of all workers – reported being exposed to unwanted sexual attention (see Figure 4 below). Differences among Member States (from 17% in Finland to 2% in Italy) suggest that there may be a lack of awareness and sensitivity to the issue, which can also explain the difference between the smaller number of reported incidents and the actual level of sexual harassment believed to be experienced by workers.\textsuperscript{82}

When sexual harassment is taken to include both verbal and physical forms, it has been estimated that between 1987 and 1997, between 40 and 50% of female employees have received unwanted sexual proposals.\textsuperscript{83} Unfortunately, comparable data for more recent periods have not been found.

\textsuperscript{78} European Parliament, \textit{New forms of physical and psychosocial health risks at work}, as above, p8
\textsuperscript{79} EU OSHA, \textit{Expert forecast on emerging chemical risks related to occupational safety and health}, Luxembourg, 2007, p103
\textsuperscript{80} Ibid., p31
\textsuperscript{81} Eurofound, \textit{Fourth European Working Condition Survey}, as above, p38.
\textsuperscript{82} EU OSHA, \textit{Workplace Violence and Harassment: a European Picture}, Luxembourg, 2010, p49. Acknowledgments to S. Mac Goris and G. Van Houten from the European Foundation for the Improvement of Living and Working Conditions for providing additional data on the 4\textsuperscript{th} European Working Conditions Survey.
As prostitution is illegal in most EU Member States, the health and safety of sex workers is often overlooked in studies and national data. The risks faced by sex workers include sexually transmissible diseases, infertility, violence and substance-abuse problems as well as mental health hazards.84

**Gender segregation with regards to household responsibilities**

Women in the family have traditionally borne the main responsibility for caring for the children and the house. Although society is changing, this remains the case in the large majority of families. This has implications for the safety and health of female workers.

*Figure 5 Composite working hours indicator by gender, EU27*

Working women often effectively face two shifts, one of paid and recognized work, the other one of unpaid work in the home. As shown in Figure 5, part-time female workers work in fact more hours a week than full-time male workers, when non-paid work is taken into account. Similarly, women who have a full-time paid job can work up to 68 hours a week.

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This can have consequences for their safety and health, because injuries or diseases developed at work might be exacerbated by their work at home, as this additional work is superimposed on their paid occupation. This can lead to an increased likelihood of upper limb disorders (from housework) and back pains (from carrying children) as well as psychological stress.\textsuperscript{85}

Additionally, where such disorders occur, home “duties” can prolong the recovery process and therefore delay return to work. However, there has been very little research on the effect of this “double shift” on the health of female workers.

Due in part to their home “duties”, women are more likely to work part-time. Over 31% of women in the work-force are part-time, compared to fewer than 8% of men. This figure is even greater in some Member States (for instance, in the Netherlands, where more than 70% of women work part-time)\textsuperscript{86}. It is interesting to note that, between 2000 and 2005, 43% of newly created jobs were part-time jobs for women, compared to 15% part-time jobs for men. In the same period, 22% of newly created full-time jobs were for men and 20% for women.\textsuperscript{87} Thus, female job creation is increasing, but the part-time nature of many of these jobs has consequences from an OSH perspective.

In addition to the issue of household responsibilities, part-time work is also more common in the services sectors where women predominate. Part-time contracts are a feature of the flexible approach adopted by more and more organisations in the service sector\textsuperscript{88}. Part-time work in sectors such as retail and health care is often associated with shift work or work during peak hours, both of which can result in higher work pressure.

Working part-time has important consequences on the health and safety of female workers. Part-time workers report receiving less training, not only in their vocational field, but also with regards to OSH rules. They might also have poorer career prospects, as it is often extremely difficult to receive promotions while working part-time. In addition, part-time workers are often entrusted with less responsibility and they have less control over their job,\textsuperscript{89} which can create stress, frustration and even depression. The third European survey on working conditions shows that part-time workers are less likely to attend training, and that they have less job security, less job control, less skills development and poorer career prospects than permanent employees, all of which can have implications for their health.\textsuperscript{90}

Although, in 2007, there was no substantial difference between the proportions of men and women who had temporary contracts (14.9% of women and 13.9% of men)\textsuperscript{91}, however it was shown that women who have part-time contracts are also more likely to have a temporary contract than those who work full-time, putting them in an even more precarious position (Section 7 discusses the health and safety issues associated with temporary employment).\textsuperscript{92} A report by the UK Trade Union Confederation showed that, out of a total of 1.5 million low-paid precarious workers in the UK in 2007, 62% were women and 38% were men.\textsuperscript{93}

\textsuperscript{85} EU OSHA, Gender issues in safety and health at work – A Review, 2003, as above, p86
\textsuperscript{86} Ibid., p28, 189
\textsuperscript{87} Eurofound Fourth European Working Condition Survey, as above, p12
\textsuperscript{88} EU OSHA, New forms of contractual relationships and the implications for occupational safety and health, Luxembourg, 2002, p5
\textsuperscript{89} Ibid., p30
\textsuperscript{90} EU OSHA, Gender issues in safety and health at work – A Review, as above, p28
\textsuperscript{91} Eurostat, Health and safety at work in Europe (1999-2007) – A statistical portrait, as above, p20
\textsuperscript{92} EU OSHA, Gender issues in safety and health at work – A Review, as above, p28
\textsuperscript{93} TUC Report p24 (Labour Force Survey: Summer 2007). The report defined precarious workers (or vulnerable workers as per this report) by the three indicators: workers with no qualifications; temporary workers (excluding those with no qualifications); people working from home (excluding those with no qualifications and those who are temporary). Moreover, a threshold wage of £6.50 per hour was used.
2.3 Health outcomes

Overview

Overall, women report a higher level of work-related health problems than men. This is true across all types of work (see Figure 6), although the differences are highest among skilled workers, both manual and non-manual.

Figure 6 Occurrence of work-related health problems in the past 12 months by occupation, EU27 (%)

Moreover, as shown in Figure 7, women have a higher level of work-related health problems in almost all sectors of the economy, apart from those traditionally male-dominated (such as mining and quarrying, electricity, gas and water supply and construction).

Figure 7 Share of employed persons with one or more work-related health problems in the past 12 months by sector, EU27 (%)

*sample size below publication limit for ‘fishing’, ‘mining and quarrying’ (women), ‘electricity, gas and water supply’ (women), ‘construction’ (women), ‘private households with employed persons’ (men) and ‘extraterritorial organizations and bodies’

Figure 8 shows that women experience higher levels than men of musculoskeletal disorders that affect the neck, shoulders, arms or hands. As a result of repetitive movements and lifting, the MSDs affecting female workers include back problems as well as upper limb disorders (neck, shoulders, arms). Women also report higher levels of stress, depression or anxiety than men.

In female-dominated sectors such as health care, education and retail, women suffer from lower-limb disorders because they are frequently standing at work.94 A German survey published in 2007 showed that 98.3% of German workers in the healthcare sector (a majority of whom are women) have to do their work standing, and 36% work in awkward postures, resulting in 64% having back pain, 66% having pain in their neck and shoulders and 37% pain in their legs.95

In the EU, MSDs increased among women by 39% between 2002 and 2005 (in comparison to a 32% increase for the whole population). In 2005, they accounted for 85% of all recognized occupational diseases among women (in comparison to 59% for the whole population).96

**Figure 8 Relative occurrence of work-related health problem indicated as most serious in the past 12 months in employed persons by gender, EU27 (%)**


94 EU OSHA, *Gender issues in safety and health at work – A Review*, p34
96 Presentation by Dr Schneider (EU OSHA) at the Closing Event of the 2007 European Week campaign on MSDs, as above.
With regard to psychological stress, national studies have shown that the work-related stress levels subsides much less quickly in women than in men when they go back home after work. This is attributed to the “double shift” (i.e. the accumulation of paid and unpaid work) experienced by many working women.\footnote{L. Doyal, S. Payne, \textit{Older Women, Work and Health – Reviewing the evidence}, TAEN – the Age and Employment Network, Help the Aged, 2006, p12-13.}

**Recognition and awareness**

Although studies and surveys show that women are equally, if not more, affected by MSDs than men, there is little recognition of this by most national compensation systems. As a consequence, reported health problems in certain sectors, and in particular the services sector, have not always been acknowledged as occupational diseases.\footnote{EU OSHA, \textit{Gender issues in safety and health at work – A Review}, 2003, as above, p17}

The following graphs, based on data from Denmark, illustrate the discrepancy between health problems reported by working women and the official recognition of these problems as occupational diseases. Figure 9 shows that between 2001 and 2008, women reported more MSDs, skin and mental health problems than men, with the exception of hearing disorders. However, as illustrated by Figure 10, official recognition was lower for women than for men.

**Figure 9 Notifications of diseases in Denmark by gender, 2008**

![Graph showing notifications of diseases in Denmark by gender, 2008](image)

**Source:** based on a graph made by Laurent Vogel, ETUI, for a presentation at the EU-O SHA Risk Observatory seminar, Brussels, 9 December 2010. The graph was compiled from various reports from the Danish National Board of Industrial Injuries.
Figure 10 Notifications and recognitions of occupational diseases in Denmark by gender, 2001-2008 (absolute numbers)


This also illustrates that national compensation statistics are not necessarily the best sources of information when it comes to discussing the level of health of (especially female) workers. Moreover, approaches vary among Member States. For these reasons, surveys at the European level with a common methodology can provide stronger, more comparable data. In part, the problem stems from the fact that some disorders such as MSDs can be widespread in the non-working population and have well-established non-occupational causes. It is therefore frequently difficult or impossible to differentiate between a disorder of occupational origin and the same disorder with another cause.

As more women work in the service sector, they suffer from a lack of awareness of the type of hazards associated with these positions. This is also true of accidents, such as slips and trips, which are common in the education and health sectors and are not tackled with the same effectiveness by the national authorities as they are in the male-dominated high-risk sectors (e.g. construction or fishing), also possibly because the potential consequences are usually less serious. Whereas the rate of accidents decreases with age among male workers, it remains steady (around 2%) for female workers aged 25 to 64 as shown in Table 4 and Figure 11, below.

Table 4 Accidents at work by age, EU27, 2007 (%)

<table>
<thead>
<tr>
<th>Age</th>
<th>Accidents at work</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-27 Total</td>
<td>3.2</td>
</tr>
<tr>
<td>Men</td>
<td>4</td>
</tr>
<tr>
<td>Women</td>
<td></td>
</tr>
<tr>
<td>15-24</td>
<td>2.6</td>
</tr>
<tr>
<td>25-34</td>
<td>2.1</td>
</tr>
<tr>
<td>35-44</td>
<td>2</td>
</tr>
<tr>
<td>45-54</td>
<td>2.1</td>
</tr>
<tr>
<td>55-64</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Source:
100 EU OSHA, Gender issues in safety and health at work – A Review, 2003, as above, p39
101 Eurostat, Health and Safety at work in Europe (1999-2007) – A statistical portrait, as above, p28
Canadian surveys have shown that the incidence rate of occupational injuries was greatest for women aged 25 and above whereas, in the case of men, it is greatest for young adults from the age of 20 to 25 and decreases with the acquisition of experience. This seems to indicate that a majority of work injuries to women do not occur because of a lack of experience.\footnote{102}

2.4 EU legal and policy framework

Together with OSH legislation, relevant provisions for women come from EU anti-discrimination legislation. The Treaty of Rome affirmed the principle that men and women should receive equal pay for equal work (Art. 119). Several directives have been adopted in view of implementing equal treatment with regard to the different components of employment: Directive 75/117/EEC on equal pay for men and women,\footnote{103} Directive 86/378/EEC on equal treatment in occupational social security schemes,\footnote{104} Directive 97/80/EC on the burden of proof in cases of discrimination based on sex.\footnote{105}

A key step towards equal treatment in the working conditions of men and women was the adoption in 1976 of Directive 76/207/EEC on equal treatment as regards access to employment, vocational training and working conditions.\footnote{106} This directive was later amended by Directive 2002/73/EC,\footnote{107} which gives a definition of harassment and sexual harassment and states that Member States must encourage prevention, establish procedures for enforcement, and prohibit limits on the compensation payable to the victim of harassment.\footnote{108}


\footnote{105} Council Directive 97/80/EC of 15 December 1997 on the burden of proof in cases of discrimination based on sex

\footnote{106} Council Directive 76/207/EEC of 9 February 1976 on the implementation of the principle of equal treatment for men and women as regards access to employment, vocational training and promotion, and working conditions


Directive 2002/73/EC also ensures that women are entitled to come back to their jobs after maternity leaves, or to an equivalent job in conditions that are no less favourable, and they should also benefit from any improvement in working conditions to which they would have been entitled during their leave. These directives were recently recast in Directive 2006/54/EC on the implementation of the principle of equal opportunities and equal treatment of men and women in matters of employment and occupation, which consolidates in a single text all the rules and case law of the ECJ relating to equal opportunities and treatment in employment. Among other things, the Directive improves procedures to make application of its principles more effective, and provides harmonised definitions of key terms, such as discrimination, sexual harassment, pay, etc.

The health and safety of pregnant workers and workers who have recently given birth or are breastfeeding is covered by Directive 92/85/EEC, which foresees the adoption of guidelines on “the assessment of the chemical, physical and biological agents and industrial processes considered hazardous” for the above-mentioned workers. These guidelines, adopted in 2000, also cover “movements and postures, mental and physical fatigue and other types of physical and mental stress”. Article 5 of the Directive states that, following the results of the assessment, if a risk to the safety or health or an effect on the pregnancy or breastfeeding of a worker is revealed, provisions must be made by the employer for the worker to be protected. In 2008, the Commission made a proposal to amend Directive 92/85/EEC and extend further the rights of pregnant workers, including through the extension of maternity leave from 14 to 18 weeks.

With regards to reproductive health, EU OSH legislation and research in general have mainly focused on pregnant workers and new mothers who are breastfeeding. Consequently, the risks to fertility and sexual and reproductive functioning for both women and men have been overlooked. For women, these would also include early menopause and menstrual disorders.

The recent adoption of the REACH (2006) and CLP (2008) Regulations represents, however, an important progress in terms of identifying new repro-toxins and providing workers with more information on the potential risks to their reproductive health.

One of the key issues when it comes to the safety and health of female workers is the prevention of musculoskeletal disorders. Some of the individual OSH directives have particular relevance when it comes to the prevention of work-related MSDs, including the directive on vibration (2002/44/EC), the one on the manual handling of loads (90/269/EEC), and the Directive on work with display screen equipment (90/270/EEC).

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113 EU OSHA, Gender issues in safety and health at work – A Review, as above, p79
However, these directives only cover a limited number of work environments and are particularly relevant for sectors traditionally dominated by men (construction, manufacturing, etc.). It has been shown that they do not cover certain situations that are favourable to the development of MSDs, such as awkward postures and repetitive movements.

For these reasons, the Commission decided in 2005 to undertake a consultation of the European social partners on the possibility to adopt new legislation addressing all significant risk factors for work-related musculoskeletal disorders. Such a Directive, which would integrate the provisions of Directives 90/269/EEC and 90/270/EEC into a single directive, would ensure that the factors which favour the development of MSDs in female workers are also covered by legislation and are systematically taken into account in risk assessments. It would help raise awareness regarding the work situations that favour the development of MSDs, which would benefit not only female workers but also many who belong to other vulnerable groups of workers identified in this study, in particular older workers, migrant workers and workers with low qualifications.\[116\]

After two stages of consultation with the European social partners, the Commission is currently finalising its proposal for a new legislative initiative intended to simplify the current legal framework on WRMSDs (work-related musculoskeletal disorders).\[117\]

One element of EU worker health and safety legislation to take into account is that it excludes domestic workers, which affects primarily women, and to a greater extent women who are migrants (see Section 6).

Policy issues

Although the current legislative framework of OSH is mainly “gender-neutral” (i.e. it promotes equality based on ignoring the differences between men and women), the Community Strategy on Health and Safety at Work 2002–2006 introduced the concept of “mainstreaming” or integrating gender issues into OSH activities, policies and considerations in general, thus allowing for a better accounting and reporting of female-specific OSH issues. The current EU Strategy 2007-2012 continues along the same line as the previous one and calls for a better consideration of the specific risks to female workers.\[119\] The European Parliament mentioned the specific risks faced by female workers throughout its Resolution on the 2007-2012 OSH Strategy and encouraged the Member States to take this into account when implementing preventive policies. In particular, it reiterated the need to mainstream gender when dealing with OSH issues, for instance in risk assessment methods.\[120\]

From a policy perspective, greater participation in employment for women is one of the goals of the Europe 2020 Strategy, which calls for an increase in the female working population. Economic independence of women, promotion of female entrepreneurship, promotion of equal pay and gender balance in decision-making are inter alia the ambitious objectives of the Strategy for equality between women and men 2010 – 2015, adopted in September 2010. The goal of greater female employment underlines the need to address health and safety issues that affect women more effectively.

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118 See, for example, Article 3(a) of Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work
2.5 Initiatives in the Member States

A review of the 2007-2012 national health and safety strategies provides an overview of the initiatives taken by the Member States targeting women’s occupational health and safety. Some national initiatives focus on specific occupations such as domestic workers (including in France, Germany and Belgium), or sectors where women are known to play a major role, for instance carers (Austria), ceramic workers (Portugal), and hairdressers (Denmark and Sweden). In other countries, guidance has been produced on preventing injuries (e.g. Netherlands and Spain) and chemical risk (Spain, France and Italy) and national training courses for women in the workplace have also been implemented (including in Netherlands and France).

A review of recent reports by EU-OSHA, Eurofound and other sources has identified additional public and private initiatives addressing occupational health and safety of women (see Annex 1). Again, many of these initiatives address specific sectors, such as domestic workers, hospital cleaning, child care and elderly care; they seek to raise awareness among workers and provide them training, or encourage employers to improve OSH management, including via guidance.

Some examples of private initiatives show innovative ways of tackling the issue of the risks faced specifically by women. One initiative undertaken in a German hospital focused on the prevention of stress at work among female cleaners: better and more integrated communication between the staff and management was implemented, which also helped raise unusual psychosocial issues, such as the inappropriateness of the cleaners’ uniforms, potentially leading to harassment situations, and these were replaced.

2.6 Opportunities for EU action

Based on the literature review illustrated above and the information gathered for this chapter, several areas can be identified that deserve further attention in EU OSH policies.

Firstly, there is a need for a holistic approach to reproductive health (including for men), not only focusing on pregnancies and nursing mothers, but taking menstrual disorders, menopause, fertility and other relevant concerns into account. Further scientific research on the effect of work on male and female reproductive health is necessary, including on fertility and sexuality at large. Research should include the possibility of implementing preventive measures for both men and women in relation to exposure to hazards associated with reproductive health problems (such as certain hazardous substances, physical work, noise, extreme temperature conditions, and occupational stress). Guidance to both employers and employees should be derived from such research.

It is important that women’s work and tasks are not automatically considered to be less physically demanding than those of men. Certain female-dominated occupations can involve extensive use of muscular strength (e.g. moving heavy loads in the health sector), maintaining awkward postures or prolonged standing and walking, and these need to be better addressed. The causes for accidents among female workers also need to be better understood as, unlike that for males, the incidence rate of accidents for women has not decreased in the past 15 years. Additional research should investigate the causes and consequences of accidents at work for female workers, as well as the reasons why they have shown to decline more slowly with age than accidents affecting men. One reason may be a need for greater attention to sectors where women have a major role, such as healthcare and education.
The effect on women’s health of the combined exposure to both paid and unpaid work (such as childcare or eldercare) should also be further studied. OSH prevention policies should take into account the “double shift” worked by most women and the physical and psychological consequences of this on their health, for example by addressing these issues in medical surveillance. Here too, guidance could be derived from improved knowledge, together with awareness raising activities.

As many women work part-time, this category of workers should be specifically addressed in health and safety actions, e.g. to ensure that they receive relevant training.

The health and safety needs of domestic workers (predominantly female) should be a particular focus, especially as they currently fall outside the terms of existing EU legislation.

Finally, psychosocial hazards should be systematically addressed. As we have seen in the study, because of the types of jobs they do, a majority of female workers interact frequently with third parties, such as patients, students and call-centre customers, and they are more exposed to harassment and violence from them, as well as from colleagues and superiors. The review of public and private initiatives in the Member States carried out for this study has identified some of the innovative practices put in place to address these risks. A detailed compilation of such best practices could provide the basis for further action, such as the development of guidance and awareness-raising actions.
3 AGEING WORKERS

KEY FINDINGS

- Ageing is associated with a natural deterioration of physical and mental capacities. The risks ageing workers face will be superimposed on this natural process.
- Ageing workers are more at risk of occupational health problems than younger workers because they have been exposed longer to certain hazards. Older workers report more work-related health problems than younger workers, with backache and muscular pain for more than 70% of workers aged 55 and more.
- Older workers are at lesser risk of non-fatal accidents because they have greater experience; however fatal accidents are more frequent than for younger workers.
- Recovery time and return to work after illness are key issues to address when aiming to increase the employment rate of ageing workers.
- In the EU Member States, actions to address this group include awareness raising and projects to adapt work organisation.
- The health and safety of older workers will be of growing importance in Europe’s ageing populations – and as retirement ages are likely to be raised. The EU can play a role by encouraging age management in enterprises, together with guidelines to help SMEs in this area. The European Year for Active Ageing in 2012 provides an opportunity for raising awareness of the health and safety issues of older workers.

3.1 Overview and socio-economic trends

The Europe 2020 Strategy recognizes the ageing of the European population as one of the three key challenges that the EU will face in the coming years (alongside globalisation and pressure on resources).121

Longer life expectancy and low birth rates mean that the population of the EU is ageing and will keep on ageing irrespective of increasing immigration rates. According to Eurostat, the median age of the population of the EU in 2010 was 40.7 years and is projected to rise to 47.9 years by 2060.122 As shown in Table 5, estimates suggest that, in 2060, almost 30% of the EU population will be over 65, compared to 17.1% in 2008. Consequently, the working population of the EU will also be ageing. As a way of comparison, in 2010, 13.1% of the working population in the EU27 was over 55 and 9.2% was under 25.123

Today, almost 15% of the working age population is aged 55 to 64. Moreover, less than half of this age group is in employment: 61% of men, 40% of women and 46% overall.124 In the face of budgetary pressures most Member States have been rethinking their retirement and pension policies: over the past decade, many EU governments have extended average working life by curtailing or restricting access to early exit schemes and programmes.125

124 Ibid.
However, these changes have not been accompanied by a systematic approach to cope with the health and safety consequences for the growing share of ageing workers.

Table 5 Ageing population in the EU

<table>
<thead>
<tr>
<th>Population over 65 (% of total)</th>
<th>2010</th>
<th>2060 (est.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio working age population: population aged 65 or over</td>
<td>3.5:1</td>
<td>1.7:1</td>
</tr>
</tbody>
</table>

**Source:** Eurostat (2010).

Although some sectors such as hotels and restaurants are dominated by a younger workforce, ageing workers are found in all sectors. They are more likely to be found in what might be regarded as the longer-standing more traditional industries (e.g. agriculture) rather than those which have developed more recently (e.g. IT).  

Due to their seniority, ageing workers tend to hold less risky positions, or those that do not require as much physical work. For example, workers over 55 dominate the agricultural sector but as skilled agricultural workers and not in the elementary occupations, where young workers are over-represented. Older workers are also a majority in high-level positions such as legislators, officials and managers.

The relationship between ageing and work is not necessarily negative, as the decline of physical capacities experienced by ageing workers is compensated for by increased skills and experience. Another key factor to take into account, highlighted by many health experts, is that active ageing, including staying at work in good conditions and in an adapted environment, can enhance older people’s well-being.

Because of the predicted ageing of the population and a greater dependency ratio between workers and retired people (Table 5), retaining older workers longer at the workplace is going to become a key issue in the coming years. In this context, the issue of OSH measures for ageing workers will also become increasingly central.

### 3.2 Risk factors

#### Summary table

<table>
<thead>
<tr>
<th>Endogenous Risk Factors</th>
<th>- natural deterioration of physical and mental capacities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- longer recovery time</td>
</tr>
<tr>
<td></td>
<td>- longer exposure to occupational hazards</td>
</tr>
<tr>
<td></td>
<td>- greater risk of developing long-term or chronic illnesses or disabilities</td>
</tr>
<tr>
<td>Exogenous Risk Factors</td>
<td>- no exogenous risk factors identified</td>
</tr>
</tbody>
</table>

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127 Ibid.
Most of the literature on ageing workers agrees on the necessity of adapting the workplace to the needs of the older workers to enable them to stay at work, despite an overall decline in their capabilities and health. There is, however, relatively little analysis of any increased health and safety risks for older workers. Obviously, adaptation of the workplace is crucial if the goal is to secure more and safer jobs for ageing workers. However, understanding the risk factors faced by older workers is essential before assessing how to improve their working conditions.

It must be noted that there is a common “healthy worker” effect in statistical data on older workers: it has been shown that studies and surveys on the health of older workers are biased by the fact that those workers who are (relatively) healthy remain at work, while many of those who experience major health difficulties choose (early) retirement.

Endogenous Risk Factors

In general, ageing is associated with decrements in cognitive functions, health, and recuperative ability. These include decreased aerobic capacity, lower heat tolerance, reduced muscular strength, slower reactions, and a decline in visual acuity and hearing ability.

Any risks to which ageing workers are exposed because of their occupation will be superimposed on their existing health problems or will amplify the natural deterioration of their sensory and physical capacities. However, account must be taken of the fact that, in parallel to this deterioration, ageing workers very often adopt a more cautious approach with regard to their safety and health, thus exposing themselves to fewer risk factors. This is confirmed by surveys and statistics showing that ageing workers are less at risk of having accidents than younger workers.

The European Foundation for the Improvement of Living and Working Conditions has looked at the risk factors to which older workers are exposed by occupation, differentiating between environmental risk factors, biological/chemical/radiation risk factors and risk factors linked to the posture of the worker or the load carried. Figure 12 below indicates that older workers face higher risks than others. Their exposure to physical or biological risks is potentially the same as the exposure of any other workers in these occupations and sectors, but a relevant difference lies in the duration of this exposure and its effect on older workers’ health.

Older workers have been exposed longer to occupational risks than younger workers in the same job. Duration of exposure is a risk factor in itself, especially when considering awkward postures or biological/chemical/radiation exposure. The development of degenerative MSDs because of long exposure to awkward postures, heavy lifting or standing and walking, is commonly reported among older workers, which is in part a reflection of the cumulative exposure.

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131 Ibid.
133 Eurofound, Working conditions of an ageing workforce, as above, p33
134 Ibid., p34
135 J. Crawford, et al., The health, safety and health promotion needs of older workers – An evidence-based review and guidance, as above, p17
Some health problems, such as MSDs, can become more common if the physical condition of the worker deteriorates, either because of a long exposure to physically-intense tasks (e.g. lifting loads or patients, cleaning, standing and walking, etc) or because of natural degenerative processes. MSDs, in particular, can occur more frequently in ageing workers because the ageing process reduces the worker’s muscular strength, which leads to a decrease in the load-bearing capacity of her/his musculoskeletal system. If workers continues to carry out the same physically demanding tasks (such as handling heavy loads) as when they were younger, they will overload their musculoskeletal system and be at greater risk of developing degenerative diseases such as lower back pains.

Similarly, in the older worker, especially the older woman, a fall at the same height is more likely to result in a fracture or other serious injury, possibly because of osteoporosis.

According to EU OSHA, the following injuries are more likely among ageing workers:
- Falls (poor balance, slower reaction times, visual problems lack of concentration);
- Sprain and strain injuries (loss of strength, endurance and flexibility);
- Cardio-pulmonary injury (over-exertion, loss of heat and cold tolerance). 136

With regards to accidents, statistics consistently show that older workers have fewer non-fatal accidents than younger workers. In general, younger workers have a higher risk of accident, but the injuries sustained by older workers are more serious and require a longer recovery time (see Figure 13).

Occupational health and safety risks for the most vulnerable workers

Figure 13 Sick leave by duration, gender and age-group in 2007, EU27

![Graph showing sick leave by duration, gender, and age-group in 2007, EU27.]


The above graphs, based on the data provided below in Table 6, show that the percentage of accidents leading to sick leave of more than one month for the 55-64 age group is double that of the 15-24 age group. In comparison, the percentage of accidents leading to sick leave of more than one day increases by only five points between the two groups. This shows that, although older workers have fewer accidents, these tend to be more serious and to require longer periods of sick leave.

Table 6 Accidents at work in 2007 by gender, EU27

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Accidents at work (%)</th>
<th>Sick leave &gt; 1 day (% of accidents)</th>
<th>Sick leave &gt; 1 month (% of accidents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-27 Total</td>
<td></td>
<td>3.2</td>
<td>73.4</td>
</tr>
<tr>
<td>Men</td>
<td>15-24</td>
<td>5</td>
<td>76.8</td>
</tr>
<tr>
<td></td>
<td>25-34</td>
<td>4.5</td>
<td>75.2</td>
</tr>
<tr>
<td></td>
<td>35-44</td>
<td>4.3</td>
<td>77.8</td>
</tr>
<tr>
<td></td>
<td>45-54</td>
<td>3.5</td>
<td>77.9</td>
</tr>
<tr>
<td></td>
<td>55-64</td>
<td>2.6</td>
<td>79.3</td>
</tr>
<tr>
<td>Women</td>
<td>15-24</td>
<td>2.6</td>
<td>57.2</td>
</tr>
<tr>
<td></td>
<td>25-34</td>
<td>2.1</td>
<td>61.8</td>
</tr>
<tr>
<td></td>
<td>35-44</td>
<td>2</td>
<td>68.6</td>
</tr>
<tr>
<td></td>
<td>45-54</td>
<td>2.1</td>
<td>65.3</td>
</tr>
<tr>
<td></td>
<td>55-64</td>
<td>2.1</td>
<td>69.5</td>
</tr>
<tr>
<td>Total</td>
<td>15-24</td>
<td>3.9</td>
<td>70.8</td>
</tr>
<tr>
<td></td>
<td>25-34</td>
<td>3.4</td>
<td>71.6</td>
</tr>
<tr>
<td></td>
<td>35-44</td>
<td>3.3</td>
<td>75.2</td>
</tr>
<tr>
<td></td>
<td>45-54</td>
<td>2.8</td>
<td>73.6</td>
</tr>
<tr>
<td></td>
<td>55-64</td>
<td>2.5</td>
<td>75.8</td>
</tr>
</tbody>
</table>


Younger workers tend to be subject to more eye or hand injuries, while older workers report more back injuries.\(^{137}\)

\(^{137}\) EU OSHA, Hazards and risks associated with older workers, as above.
The sectors where there is the highest rate of fatal accidents for older workers are agriculture, forestry or fishing (26%), construction (11%), manufacturing (11%), transportation (11%) and retail (12%).\textsuperscript{138}

In general, there are differences between men and women with regard to accidents. In the UK for instance, male workers over 55 have the lowest incidence of non-fatal accidents among all male workers, which is in contrast to female workers over 55, who have the highest incidence of non-fatal accidents among all female workers, as reported by the UK Health and Safety Executive report on \textit{Self-reported work-related illness and workplace injuries in 2008/09: Results from the Labour Force Survey}. One possible explanation could be that women over 55 tend to be concentrated in 'blue-collar jobs', whereas younger women are more concentrated in 'white-collar jobs'.\textsuperscript{139}

Studies in the United States have shown that ageing nurses are most affected by back pain and musculoskeletal diseases, needle injuries, anxiety and depression and that, in contrast to the agricultural and construction sectors, occurrences of occupational injuries and illnesses in the health care sector have increased over the past decade.\textsuperscript{140} This appears to confirm that occupational health problems affecting mostly women (and in this case older women) are not as well recognized and dealt with as those affecting male workers.

This differing pattern between male and female workers with regard to accidents and injuries has already been discussed in the previous chapter. It was noted that the decreasing rate in non-fatal accidents among male workers could be explained by increased experience and maturity and a better knowledge of working techniques. However, the increasing incidence rate in older female workers appears to relate to the fact that women are more at risk of certain types of accidents such as falls, slips and muscle strains, which are not necessarily linked to inexperience.

Ageing female workers face another risk factor, not directly linked to their jobs but which can account for a deterioration of their health and, eventually, affect their employability. Similarly to younger women who bear the biggest share of childcare in the household, older women often have to care for an ageing parent or relative. This additional, not work-related, “burden” can involve physical and emotional exhaustion.\textsuperscript{141} Studies suggest that caring for a disabled partner or elderly parent can be very different from caring for children, with great tensions and conflicts associated.\textsuperscript{142} The effect of this extra work on women’s health can be serious and will superimpose on their occupational health problems. It would be very difficult to account for this factor in occupational health and safety management, however elderly care, similarly to childcare and house care, should be taken into consideration in occupational health surveillance.

Recovery time is a crucial issue when discussing the health of older workers. In order to achieve a higher employment rate among workers above 55, as targeted by the EU, creating the conditions for a healthy recovery for older workers after an injury or a health problem is a priority. Studies have shown that returning to work is less of an issue from a psychosocial point of view for older workers than for younger workers whose relationships in the workplace (with their superiors and colleagues) are not as well established.\textsuperscript{143}

\begin{flushright}
138 J. Crawford, R., et al., \textit{The health, safety and health promotion needs of older workers – An evidence-based review and guidance}, as above, p24
138 \textit{Ibid.}, p24
139 J. Crawford, et al., \textit{The health, safety and health promotion needs of older workers – An evidence-based review and guidance}, as above, p23
\end{flushright}
However, after a major injury or health problems, workers can become de facto workers with disabilities and the risks of returning to work for these workers must be carefully assessed, as they will be different from the pre-injury situation.

As mentioned earlier, many older workers, who have suffered a serious injury or a long-term illness will chose early retirement rather than returning to work and facing potential additional risks. The UK Labour Force Survey showed that 48% of people in the UK aged 50 to 65 who were economically inactive in 2006 were inactive because of a sickness, disability or injury, while the 1995 EU Labour Force Survey showed that illness or disability, although very variable across the Member States, accounted for up to 25% of retirements.

Early retirement in these conditions is a concern for health: as noted above, work in good conditions and an adapted environment is better for people’s health than being inactive. For example, a 2006 review of scientific studies for the UK Department for Work and Pensions looked specifically at the impact of work on people’s health and found that work is generally good for physical and mental well-being and that being out of employment is often associated with poorer health.

With regard to work organisation, in the EU25 only 11% of workers aged 55 and above report working shifts, compared to 20% of those aged between 24 and 39. It appears that older workers are more impacted by overtime work, especially in physically-demanding jobs. Shift work is also more onerous for female workers over 35 and male workers over 45. However the “healthy worker effect” tends to mean that only those workers whose health is not affected by shift work will keep working shifts as they age. This implies that statistical data looking at the health of older workers working shifts is biased and the problems may be underreported.

The effects of shift work (i.e. disrupted personal life, chronic fatigue, sleep losses and disturbances, digestive problems) and overtime work (work-related stress) are likely to be more severe in older workers. Older workers are less able to regulate sleeping patterns than younger workers. Therefore, older workers working shifts may need a longer recovery time between shifts, which is not usually systematically accommodated in the work organisation.

Many studies, carried out in Norway and Sweden, have shown that migrant workers are more prone to illness than other groups as they grow older, which has consequences for Member States’ social security systems as the current migrant population ages.

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147 EU OSHA, Expert forecast on emerging psychosocial risks related to occupational safety and health, European Risk Observatory Report, Luxembourg, 2007, p41
148 J. Crawford, et al., The health, safety and health promotion needs of older workers – An evidence-based review and guidance, as above, p23
150 J. Crawford, et al., The health, safety and health promotion needs of older workers – An evidence-based review and guidance, as above, p23
151 EU OSHA, Hazards and risks associated with older workers, as above.
With regard to psychosocial characteristics, it has been widely shown that ageing workers report more job satisfaction than younger workers. Older workers are more likely than younger workers to have higher responsibilities and more autonomy to do their tasks. Job insecurity, often negatively linked to job satisfaction, is reported to decrease with age, which can be linked to the fact that in today’s labour market the percentage of non-permanent contracts is higher for younger workers than for older workers. However, it has been reported that older workers have more difficulties coping with lack of control over their work, which can lead to high stress levels and is associated to negative mental health outcomes.

Ageing workers face specific psychosocial issues associated with increasing age. Learning abilities are different for older workers as they need more time to reflect upon what they have learned. It has been reported that older workers also need improved coping strategies to deal with work-related stress, as well as greater support from colleagues and co-workers.

### 3.3 Health Outcomes

As demonstrated by Figure 14 and mentioned in the previous section, there is a much higher occurrence of work-related health problems among older workers.

Figure 15 shows the most common health problems self-reported by workers over 55. It can be seen that the most widespread symptoms relate first to deteriorating physical functional capacities and then to general fatigue and psychosocial problems (stress, headaches, sleeping problems, irritability, etc.). In comparison, the LFS ad hoc module 1999 reported that young workers (under 25) are mainly affected by skin problems, headache and eye strain, infectious diseases and pulmonary disorders. It also showed that, among the different age groups, young workers have the lowest prevalence in musculoskeletal disorders and stress, depression or anxiety.

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153 Eurofound, *Working conditions of an ageing workforce*, as above, p24
156 J. Crawford, *The health, safety and health promotion needs of older workers – An evidence-based review and guidance*, as above, p27
3.4 EU legal and policy framework

Health and Safety

Directive 2000/78/EC on equal treatment in employment and occupation supplements EU OSH legislation in ensuring that older workers benefit from equal rights with regard to occupational health and safety measures.

The Community Strategy 2007 – 2012 on health and safety at work identifies the promotion of the safety and health of workers within the 55-64 age group as one of the major factors that will help raise the average employment rate of these workers in the EU. The Strategy mentions that work organisation and occupational health and safety can contribute to ensure wellbeing at work, preventing early withdrawal from the labour market.

The European Parliament’s resolution of 15 January 2008 on the 2007-2012 OSH strategy, recalling the implications of demographic changes on occupational health and safety policies, encouraged the Commission and the Member States to reinforce measures preventing physical decline of work capacity, including through ergonomics and workplace design.157

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Funding and research

Among many other programmes targeting the issues related to an ageing EU population, the European Social Fund has financed the set up of the Age Network, in order to develop programmes and projects specifically targeting age management. It is running from February 2010 until January 2013 and has a budget of over €670,000. One of the networks’ two working groups addresses sustainable employability and work ability, including occupational health.

Much age-related impairment of capabilities stems from degenerative changes (e.g. spinal degeneration). Improving our understanding of the processes associated with degenerative change will permit earlier intervention, reducing the rate of deterioration and therefore extending healthy and productive working lives. Healthy ageing is one of the priorities of the 7th Research Framework Programme (2007-2013)\textsuperscript{158}, which has financed already many projects looking at \textit{inter alia} the biomarkers of human ageing and the developmental processes of long-lived organisms throughout their lives.\textsuperscript{159}

Greater workforce participation

As mentioned in Chapter 1 (Background Information), the Europe 2020 Strategy has set the goal of 75% employment rate for the age group 20-64 by 2020. To achieve this, an increase in employment of workers aged over 55 is going to be essential. The European Commission’s Communication \textit{Increasing the employment of older workers and delaying the exit from the labour market}, published in 2004, recalls the conclusions of the 2001 Stockholm European Council which undertook to raise the average employment rate in the EU for men and women within the 55-64 age-group to 50% by 2010. Although this goal has not yet been achieved, the trend is quite positive as the employment rate of 55-64 year olds rose from 36.9% in 2000 to 45.6% in 2009.\textsuperscript{160}

In its Communication, the Commission strongly encourages Member States to implement appropriate measures to retain ageing workers at work. Among the different necessary measures, the Commission mentions improving working conditions, including adapting the work load and upgrading health and safety measures to the needs of ageing workers.

In addition, on 8 June 2009, the Council adopted its ‘Conclusions on equal opportunities for women and men: active and dignified ageing’, in which it recommended that Member States integrate the issue of ageing into all relevant policies. It called on the Member States, in cooperation with the social partners, to promote active ageing for older workers, to encourage and support employers in recruiting and retaining older workers in employment and to create the necessary conditions for their success as workers as well as for their self-fulfilment.\textsuperscript{161}

3.5 Initiatives in the Member States

In their national health and safety strategies, many Member States have set the objective to improve the working conditions for ageing workers and to allow them to stay in employment longer, with a view to reducing the rates of early retirement.

\textsuperscript{159} European Commission, DG Research and Innovation, Human development and ageing page. Available at: http://ec.europa.eu/research/health/medical-research/human-development-and-ageing/index_en.html (consulted July 2011)
\textsuperscript{160} Eurostat news release, \textit{Labour Force Survey - Employment rate in the EU27 fell to 64.6% in 2009, 117/2010 - 4 August 2010.}
\textsuperscript{161} Council of the European Union, \textit{Council Conclusions on Equal opportunities for women and men: active and dignified ageing}, 2947\textsuperscript{th} Employment, Social policy, Health and Consumer Affairs Council meeting, 8 June 2009, Luxembourg.
Several Member States have sought to increase the participation of older citizens in the workforce through actions including training programmes (Hungary and Romania) and appropriate management strategies (found in Austria, France, Germany and other Member States).

A review of recent EU studies has identified several initiatives in the Member States that address older workers. These include awareness-raising activities, as well as some training. In addition, several government programmes have provided funding to strengthen the health and safety of older workers: an example is the grants provided in Poland to reimburse the costs of adjusting workplaces to the needs of older workers.

Among innovative private initiatives, the ones focusing on work organisation to retain older workers have been very successful. Some companies have made changes in their work organisation, including age-adjusted shift schedules (e.g. reduction of night shifts, longer shift breaks) and reduction of working time. Other companies have adapted the workplace and work environment to the needs of older workers, for instance, by improving cooperation between occupational health experts, workers and management for ergonomics improvements or for redeployment.

### 3.6 Opportunities for EU action

Several key issues for attention have been identified in this study.

It will be increasingly important to consider age when planning OSH management at the company level, in order to adapt tasks to the capacities of older workers and to prevent workplace accidents and illnesses, which can be more serious for older workers. This approach would look at issues such as: work organisation (including working hours and shifts); workloads; adaptation of work stations; and the transfer of skills and competences from older to younger workers. A framework agreement between EU social partners could offer the setting for a comprehensive approach to age management at the EU level.

As part of a comprehensive approach to age management, preventive occupational medicine should focus on the early signs of diseases or injuries in older workers to prevent their evolution to chronic illnesses or disabilities. A further area is ensuring adequate recovery time for older workers who have suffered injury or illness, to keep them within the workforce. As older workers are more likely to develop diseases or to have accidents leading to a chronic health problem or a disability, planning adequate recovery time is key to a successful reintegration in the workplace.

Eurofound has already identified best practices for age management in European enterprises: this work could constitute the basis for further initiatives. Guidelines on the implementation of successful age management strategies in SMEs could be valuable, as these enterprises have less capacity to undertake elaborate planning.

Research and awareness raising could also look at issues concerning older women employees, some of whom face additional risks in combining employment and household work, such as care of a dependent relative or spouse.

The European Year for Active Ageing 2012 will provide an opportunity to integrate actions related to worker health and safety into the year’s activities and to raise awareness of the importance of age management and healthy working conditions for older workers. Actions in these areas would help to implement the Commission’s 2004 recommendations to upgrade health and safety measures to the needs of ageing workers.

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163 Communication on Increasing the employment of older workers and delaying the exit from the labour market, COM(2004) 146 final
4 WORKERS WITH DISABILITIES

KEY FINDINGS

- Workers with disabilities are a diverse group, and thus the health and safety risks they face vary greatly. The complexity of analysis at EU level is compounded by the use of different approaches and definitions across Member States to identify and classify disabilities.

- In most EU countries, it appears that only a small proportion of people of working age with disabilities have employment.

- Many workers with disabilities, however, have low-skilled work and many have part-time contracts: both forms of work bring higher health and safety risks. Such workers also face discrimination in the workplace, including lower salaries.

- While EU-wide data on the specific occupational health and safety issues faced by workers with disabilities are not available, studies have tended to focus on the obligations of employers with regard to accommodating people with disabilities.

- Member States’ initiatives include training programmes, guidance for adapting workplaces and comprehensive approaches for OSH management in SMEs.

- At EU level, a better understanding of the occupational health and safety issues for workers with disabilities would be valuable.

4.1 Overview and socio-economic trends

Increasing the employment rate of workers with disabilities is an important policy goal at both EU and Member State levels. One basic reason for this could be purely economic, as people with disabilities who are out of work do not participate in the economy, and many depend on pensions or disability allowances. It has been estimated that improving the employment of persons with disabilities would boost the UK economy by the equivalent of six months’ economic growth.164

However, another key reason to ensure that these workers have access to or stay in employment is that work integration can contribute to maintaining or improving their well-being and health conditions.165 Studies have tended to show that work can help those with disabilities in their everyday life, helping to give them a sense of empowerment and self-efficacy; this is the case especially for people with psychiatric disabilities (such as schizophrenia, bipolar disorders, depression or post-traumatic stress disorder), for whom successful work integration can support rehabilitation166.

166 H. L. Provencher, R. Gregg, S. Mead, K. Mueser, “The Role of Work in the Recovery of Persons with Psychiatric Disabilities”, Psychiatric Rehabilitation Journal, 26(2):132-44, Fall 2002. On the other hand, people with illnesses such as epilepsy or schizophrenia may find it harder to work in competition-intensive jobs such as the financial sector: studies suggest that people with epilepsy find that the frequency of their seizures increases if exposed to stress or tension (Betts T, “Epilepsy and stress”, BMJ, 305, 378-9, 1992) and there is evidence for a role of stress.
Description and characteristics of the group

Workers with disabilities are a very diverse group. Identifying and describing the occupational health and safety situation of people with disabilities is difficult at EU level, as data are hardly available. Moreover, the definition of disability used varies considerably across the different Member States and there is none officially adopted at European level.

Disabilities are typically divided into physical (which can include long-term conditions, such as heart disease) and mental disabilities (including mental deficits and psychiatric disabilities, or social disabilities). EU OSHA defines disability in terms of “both physical and mental impairments” for “all employees who might be hampered in their work performance”. At the same time, EU OSHA notes that Member States set specific definitions in their legislation, and that these differ from Member State to Member State.\textsuperscript{167} In 2002, a comparative analysis of the different definitions of disability in Europe was carried out for the European Commission (DG Employment and Social Affairs).\textsuperscript{168} Even within Member States, legal definitions of disability can differ from one policy area to another, for instance with respect to employment measures or regarding social assistance.\textsuperscript{169} The definition of disability determines inter alia the extent to which workers with impairments fall under the scope of ad hoc measures and legislation under EU and national provisions.

Defining disability

The United Nations Convention on the Rights of Persons with Disabilities, which the EU and the Member States have signed, defines people with disabilities as including “those who have long-term physical, mental, intellectual or sensory impairments, which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others” (Article 1).

In the case 

Chacon Navas v Eurest Colectividades SA, the European Court of Justice (ECJ) gave a general definition of the concept of disability in the context of Directive 2000/78/EC as “referring to a limitation which results in particular from physical, mental or psychological impairments and which hinders the participation of the person concerned in professional life”. The Advocate General, whose opinion was confirmed by the ECJ, tied disability to the concept of permanent limitations and, while he acknowledged that illness could lead to disability, he asserted that illness in itself was not enough to trigger protection under the Directive.

Although the UN Convention on the Rights of Persons with Disabilities\textsuperscript{170} and ECJ case law have set general definitions for the term (see box above), these leave room for uncertainty in several areas. One is with regard to the inclusion in their scope of those long-term illnesses that either can develop into a permanent impairment or can cause short-term impairments. Moreover, another key issue is that of setting the defining criteria for work-related “impairments”, as these can depend on the type of job a person holds.


\textsuperscript{168} Brunel University, Definition of disability in Europe – a comparative analysis, for DG Employment and Social Affairs, Social security & social integration, September 2002.

\textsuperscript{169} T. Degener, Definition of disability, EU Network of experts on disability discrimination, study carried out for DG Employment and Social Affairs, August 2004.


Clearly, a person suffering from heart disease may not be strongly impaired in his or her ability to perform a sedentary job in an office; however, heart diseases can make people more vulnerable to factors such as the effects of temperature changes, lifting of heavy weights and psychological stress, each of which are characteristics of some jobs. Long exposure to these risk factors could lead to a permanent limitation in ability.

The International Classification of Functioning, Disability and Health (ICF) developed by the World Health Organisation (WHO) addresses these issues through a comprehensive framework that considers body, individual and societal perspectives and allows for the inclusion of contextual and environmental factors. The ICF acknowledges that every human being can experience a decrement in health and some degree of disability at some stages in life and provides a common metric to compare all health conditions. This approach has been used in WHO surveys and adopted or piloted in several countries around the world; in the EU, Italy has piloted this approach.\footnote{WHO, \textit{International Classification of Functioning, Disability and Health (ICF)}: http://www.who.int/classifications/icf/en/ (accessed July 2011)}

Indeed, many disabilities develop during adult life and many are not immediately visible or perceived as such.\footnote{R. Wynne and D. McAnaney, \textit{Employment and disability: Back to work strategies} Eurofound, Luxembourg, 2004, p3} Employees might not consider themselves as 'disabled', even though they suffer from a mental or physical impairment which makes it difficult for them to perform some work tasks or which can deteriorate with work. Changes to the work environment and/or to the worker's routine addressing increased occupational safety and health risks may be necessary to ensure that these limitations do not become permanent or more serious ones; however, under a restrictive approach, only people with permanent impairments may be entitled to claim workplace adaptation that addresses these risks.

Difficulties are particularly apparent in addressing the needs of older workers. Disabilities are often associated with older age, and the prevalence of disability or limitation is highest among people over 55 years old; in addition, a very large number of older workers have small impairments which might not be recognized as disabilities and might not therefore be addressed as such.\footnote{CEN/CENELEC Guide 6, \textit{Guidelines for standards developers to address the needs of older persons and persons with disabilities}, Edition 1, January 2002, pV-1.} With a growing proportion of older workers, assessing the needs of those workers who have developed disabilities or impairments with age becomes vital.

Council Directive 2000/78/EC establishing a general framework for equal treatment in employment and occupation states that:

"In order to guarantee compliance with the principle of equal treatment in relation to persons with disabilities, reasonable accommodation shall be provided. This means that employers shall take appropriate measures, where needed in a particular case, to enable a person with a disability to have access to, participate in, or advance in employment, or to undergo training, unless such measures would impose a disproportionate burden on the employer. This burden shall not be disproportionate when it is sufficiently remedied by measures existing within the framework of the disability policy of the Member State concerned." (Article 5)

Article 7(2) of the Directive further specifies that "With regard to disabled persons, the principle of equal treatment shall be without prejudice to the right of Member States to maintain or adopt provisions on the protection of health and safety at work or to measures aimed at creating or maintaining provisions or facilities for safeguarding or promoting their integration into the working environment".

\footnotesize{172} R. Wynne and D. McAnaney, \textit{Employment and disability: Back to work strategies} Eurofound, Luxembourg, 2004, p3
\footnotesize{173} CEN/CENELEC Guide 6, \textit{Guidelines for standards developers to address the needs of older persons and persons with disabilities}, Edition 1, January 2002, pV-1.}
The principles of equal treatment and accommodation are also established in the UN Convention on the Rights of Persons with Disabilities. Under this Convention, Parties have undertaken to “protect the rights of persons with disabilities, on an equal basis with others, to just and favourable conditions of work, including equal opportunities and equal remuneration for work of equal value, safe and healthy working conditions, including protection from harassment, and the redress of grievances” (article 27.1.b) and to “ensure that reasonable accommodation is provided to persons with disabilities in the workplace” (article 27.1.i).

Accommodation requires adjustments to the workplaces (or to work organisation) either to enable workers with disabilities to carry out jobs, or not to restrict their ability to do so, which involves identifying and managing specific occupational health and safety risks. While in the EU abundant literature exists on accommodating workers with disabilities at the workplace, in particular for people with physical disabilities, these sources rarely cover the long-term integration of occupational health and safety issues.

**Socio-economic trends**

Overall, unemployment among people with disabilities remains very high. Many OECD countries, including several EU countries, spend significant amounts providing disability benefits, including supporting people who would have the capacity to work if suitably adapted work was available. However, this direct financial cost is only part of the adverse impact of current policies and procedures. In addition to being a cost to governments, unemployment within this subgroup is a huge cost to the individuals involved in terms of their quality of life, social isolation, lost educational opportunities and damaged career prospects.

The first difficulty encountered by disabled people is that of actually gaining access to the job market. According to the European Disability Forum, a person with a disability is three times more likely to be unemployed than a person without.

The situation varies widely between Member States. For example, a 2005 survey in Bulgaria found that about 13% of people with disabilities of working age had employment, while in Estonia the level in 2002 was about 25%. The level of employment of those with disabilities appear to be considerably higher in Austria, where in 2005 there were about 91,000 persons registered with disabilities, of whom about two thirds were employed. This suggests that the level of employment can vary significantly, possibly related to policies for people with disabilities. It is difficult to pronounce on this with any certainty without a comparison of how disability is defined in these different Member States. However, it does appear that people with severe disabilities, mental health disabilities or multiple disabilities have an even lower chance to be employed.

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175 EU OSHA, Workforce diversity and risk assessment: ensuring everyone is covered, Working Environment Information, Belgium, 2009; R. Andrich et al, Disabilità e lavoro: un binomio possibile – Metodi ed esperienze di progettazione di ambienti e processi di lavoro per lavoratori con limitazioni motorie, Fondazione Don Carlo Gnocchi (Ricerca Ministero del Lavoro n. 1491 – Elaborato Finale), 2009

176 OECD, Sickness, Disability and Work: Keeping on track in the economic downturn, Background paper for the High-level Forum, Stockholm, 14-15 May 2009

177 R. Wynne and D. McAnaney, Employment and disability: Back to work strategies, as above, pp11-12

178 European Disability Forum, Annual report 2008-2009, p16


Some countries have introduced employment quotas for people with disabilities, obliging employers to hire a certain proportion of people registered as having a disability and imposing levies on those employers who do not fulfil their quotas. Quotas in the EU vary, from 2-4% of the workforce in Luxembourg and Spain to 6% in Poland. However, these obligations are rarely fully complied with.

**Low-qualified positions**

In addition to being underrepresented in employment, a further problem for workers with disabilities is that they are more likely to have low-paid jobs and, more generally, studies have shown that workers with disabilities earn less than workers with no disabilities. In the OECD, the difference in 2003 between what workers with disabilities earned and what other workers earned ranged between 5 to 15%.

This is not solely due to the lower 'work productivity' of disabled workers: by differentiating between visible disabilities and non-visible ones and differentiating between workers who identify their disability as 'non-work limiting' and those who report it as 'work limiting', researchers have shown that wage gaps also result from discrimination and prejudices. Discrimination is even greater for disabled women than for disabled men in terms of work participation and wages.

Workers with disabilities tend to be concentrated in relatively low skilled jobs such as administrative, secretarial and personal services. A Spanish study for Eurofound has shown that posts with high responsibility or those that may entail working closely with the public are reported not to be suitable for people with disabilities. In Spain, the majority of disabled people hired in 2006 found work as office clerks (37.7%) or low-qualified workers (31.8%). This is not just a reflection of discriminatory market attitudes towards disabled workers, but also of the fact that people with disabilities have, on average, lower educational qualifications than people without disabilities. The fact that a large part of workers with disabilities have low-skilled jobs work can have specific, additional consequences in terms of their occupational safety and health.

A Swedish study, carried out in 2006 for Eurofound, has shown that 3.7% of workers with disability and a reduced ability to work were rebuffed because of their disability when applying for promotion and 8.5% were unfairly treated in the setting of wage rates.

### 4.2 Risk factors

#### Summary Table

<table>
<thead>
<tr>
<th>Endogenous Risk Factors</th>
<th>- Different risks to those faced by non-disabled workers, related either to a decreased tolerance of the body part/function affected by the disability or an increased load on other body parts/functions</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>- Superimposition of occupational risk factors on the effects of the disability</td>
</tr>
<tr>
<td>Exogenous Risk Factors</td>
<td>- Segregated into low-skilled jobs and discrimination (employment, pay, occupations, etc.)</td>
</tr>
</tbody>
</table>

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182 OECD, *Sickness, Disability and Work: Keeping on track in the economic downturn*, as above, p25
Appropriate OSH management requires a specific risk assessment and specific solutions to the different issues disabled workers are confronted with. While occupational health and safety concerns can be, and have long been, a ground for excluding people with disabilities from (some) workplaces or specific work tasks, it can be demonstrated that the integration of OSH issues within the 'reasonable accommodation' approach provides a powerful tool for the successful, long-term inclusion of workers with disabilities into employment.

**Accommodating workers with disabilities**

A comprehensive overview of “reasonable accommodation” or suitable preventive measures, as described by EU OSHA, are provided in a guidance document by the UK Health and Safety Executive prepared for the attention of employers and employees with disabilities. Reasonable accommodation can include changing the working hours, providing time-off for treatment, getting new equipment or adapting existing equipment, and providing training for disabled workers and their colleagues. If a proper risk assessment is carried out and reasonable accommodation provided, workers with disabilities should face no greater health and safety risks than their colleagues with no disabilities. However, each situation should be carefully assessed by OSH professionals.

A study in Italy has analysed 16 cases of workers with disabilities in which occupational health and safety risks assessment tools have been used to identify areas where accommodation was needed. The study noted, however, that standard methods for evaluating workplace hazards are not intended for workers with disabilities and have to be adapted to their specific needs. In general, the study confirms that risk assessment and accommodation tailored to the individual worker with disabilities can play a key role in making sure that jobs and work environments suit the concerned employees, therefore promoting their long-term employment. It also highlights the need for proper training, both for the worker with disabilities as well as for those who supervise his or her work and design the workplace, to ensure awareness and proper management of risks.

The usual OSH risks associated with a certain job or task will still usually apply to workers with disabilities. For instance, a worker with reduced arm and hand mobility who works in an office specifically adapted to his/her impairment can still develop MSDs because of repetitive arm movements.

Moreover, people with disabilities can also be subject to additional risks, and/or can be more susceptible to the same risks. This would be the case for workers with a physical disability who, in order to perform a given task, need to compensate for their disability by overloading parts of their body which would not otherwise be involved or would be involved at a lower extent. A different example is provided by those whose respiratory health is compromised by a chronic health problem and who are more likely to experience adverse risks from workplace respiratory hazards.

In contrast, unlike workers with normal vision, a visually-impaired worker using adapted computer equipment will not be affected by the visual fatigue linked to long exposure to computer screens. However, as a further potential problem, measures introduced to enable a person with a disability to perform certain tasks can themselves present a risk to health. Although indispensable to certain workers with disabilities, the repetitive use of assistive technology, like any other tool, can create a potential hazard.

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Assessing the risks faced by the workers with disabilities also therefore includes assessing the risks linked to the use of any adapted equipment or assistive technology.  

Special considerations are needed for workers with mental disabilities. For such workers, besides medical supervision, some form of mentoring at the workplace should be provided for. As recalled above, being in employment can have noticeable positive effects on the health of these disabled people.

**Further considerations**

In order to accommodate treatment needs or other obligations related to their disability, workers with disabilities are more likely to have part-time employment. This can help them achieve a better balance between their personal and health needs and their working life. Some national schemes, such as the Danish “flex jobs” system, have adapted the working week of people with disabilities while providing them with a partly state-subsidised salary. Such schemes have given workers with disabilities the opportunity to have a job when they would otherwise have stayed unemployed. However, the risks for the workers’ health and safety associated with these types of contractual arrangements, such as less access to OSH training and less chance to be unionized, can have further negative consequences (see Section 7).

A further issue to raise is that of return to work after accidents or long-term health problems (work or not work-related) causing permanent or temporary reduced work capacity, whether or not this may be identified as 'disability' in strict legal terms. In particular, for those physical and mental impairments that are not systematically considered as disabilities in the national compensation systems or which do not correspond to the strict definition of the national legislation, the worker returning to work might be expected to carry out the same tasks as before, thus putting him or herself at greater health and safety risk. As recalled above, these considerations are especially relevant for an ageing workforce.

Steps to accommodate workers with reduced work capacity in the workplace can make it easier for those affected to return to work or speed up their return to work. Moreover, such steps play a key role in ensuring that workers with impairments remain in paid work for longer. In general, it has been shown that the health of people who become unemployed because of a disability deteriorates at a faster rate than that of those who continue to work.

**Discrimination**

The Swedish study carried out for Eurofound has shown that discrimination against workers with disabilities can be quite high. One way this manifests itself is through access to training. For example, 3% of workers with disabilities but 5.1% of workers with disabilities and a reduced ability to work have reported not being able to participate in training, since it was not adapted to their disabilities.

The same study showed that those with a disability whose ability to work was impaired were more likely to be bullied, harassed or offended, with 8.4% compared to 4.9% of disabled workers without any work impediment. No comparisons are provided against further subgroups (e.g. with no disability).

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In addition, if the disability arises from a work-related injury, workers can face scepticism on the part of their employer and colleagues, which can push them into hiding their injury or the related problems. When they go back to work, workers can face reassignment to light-duty (or restricted-duty) tasks, meaning social displacement, or they can be "punished" for not being to perform or achieve targets as well as they used to (especially if they are part of a team).\(^{196}\)

As many workers with disabilities are segregated into low-skill and low-paid jobs, they may experience less job satisfaction than workers with no disabilities. They are more likely to have monotonous and repetitive tasks, fewer responsibilities and less control over their work. These factors can have consequences on their health as they might not be in a position where they can choose their pace of work or when they can take breaks.

### 4.3 Health outcomes

Overviews and data on accident and health problems among EU workers with disabilities were not found at EU level.

A nationwide study in the US, conducted in 1996-1997, found that workers with disabilities were at a 36% higher risk of suffering from an occupational injury\(^ {197}\). This study found that workers most at risk of occupational injuries because of their disabilities were those with a sensory impairment (blindness, deafness, hearing impairment) and then those with upper extremity impairment. However, the study noted that workers with other, more severe, disabilities are underrepresented in the workforce, and that any risk to them might not be accurately estimated.

No equivalent national studies in the EU have been identified.

### 4.4 EU legal and policy framework

As discussed above, the rights of people with disabilities at the workplace are covered by EU legislation relating to both discrimination and health and safety at work. Reference is made in the Framework Directive and individual directives to the protection of the health and safety of workers with disabilities – for instance through the provision in Directive 89/654/EEC on the minimum safety and health requirements for the workplace stipulating that employers are required to organise workplaces ‘to take account of handicapped workers, if necessary’.

As already recalled, Directive 2000/78/EC establishing a general framework for equal treatment in employment and occupation prohibits discrimination on the ground of disability and specifically calls for the 'reasonable accommodation' of workers with disabilities at the workplace.

The mainstreaming of issues related to disability in EU policies has been an objective of the EU Disability Action Plan (DAP) 2003-2010 in order to create the conditions for the equal treatment of people with disabilities. The DAP was renewed every two years and sets policy priorities which aim at fostering equal treatment for people with disabilities.

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The 2008-2009 DAP indicated that the Employment Equality Directive had been transposed in all national legislation in 2008.\textsuperscript{198}

On 15 November 2010, the European Commission launched the new \textit{European Disability Strategy 2010-2020: A Renewed Commitment to a Barrier-Free Europe} aiming at further empowering people with disabilities and ensuring effective implementation of the \textit{ad hoc} UN Convention.\textsuperscript{199} As part of this Strategy, the Commission identified eight main areas for action, including employment and health. While the employment objective essentially focuses on increasing the employment rate of people with disabilities, especially young people, the health objective includes health and safety at work as an area for action. In particular, the Strategy emphasizes that attention should be paid to the prevention and reduction of the risk of disabilities developing during working life. The issue of reintegration of workers with disabilities into the workplace is also highlighted.

The Community Strategy 2007-2012 on health and safety at work identifies the rehabilitation and reintegration of workers coming back from a long-term absence after an accident, an illness or a disability as one of the four areas national strategies should focus their efforts on. The European Parliament, in its Resolution of 15 January 2008 on the 2007-2012 OSH Strategy called on the Commission to draw up a charter for the protection of the rights of cancer patients and people with chronic diseases in the workplace in view of systematically implementing return-to-work strategies. It also emphasized the need to support workplaces in providing specific health services to people with disabilities, to minimise and prevent further disabilities.\textsuperscript{200}

The EU also supports workers with disabilities through financing mechanisms. Employment measures targeting people with disabilities are supported through operational programmes in Member States funded by the European Regional Development Fund (ERDF) and by the ESF.\textsuperscript{201} In addition to funding measures, policy measures also target the collection of data on the employment and working conditions of people with disabilities.

### 4.5 Initiatives in the Member States

A few examples of initiatives targeting the health and safety risks to workers with disabilities were identified by reviewing Member States’ OSHA websites and national strategies. Initiatives in the Member States include OSH training targeting young disabled workers (Germany), OSH adaptation in the workplace (several Member States, including Denmark, Netherlands and UK) and guidance on work adaptation for disabled workers (Spain and UK). In Italy, a recent project looked at the occupational health and safety risks faced by workers with disabilities, involving several workers with different types of disabilities and in different economic sectors and workplace environments.\textsuperscript{202}

An interesting measure by a non-EU country, Norway, is worth mentioning. The ‘\textit{Arbeid med bistand}’ initiative (‘Working with assistance’) seeks to develop employment support for people with disabilities through the use of job coaches or support workers, who assist people with vocational disabilities in finding and retaining employment.


\textsuperscript{202} R. Andrich \textit{et al}, \textit{Disabilità e lavoro: un binomio possibile – Metodi ed esperienze di progettazione di ambienti e processi di lavoro per lavoratori con limitazioni motorie}, Fondazione Don Carlo Gnocchi (Ricerca Ministero del Lavoro n. 1491 – Elaborato Finale), 2009
The review of Eurofound and EU OSHA reports identified several programmes aimed at addressing OSH management for workers with disabilities. As an example of good practice at the national policy level, Finland has developed a coherent and comprehensive OSH management framework called the ‘Maintenance of Work Ability’, specifically targeting SMEs, and encouraging employers, through funding, to provide a safe and healthy workplace for all workers. The different elements of the programme include providing advice to employees from occupational health experts and monitoring the work ability of disabled workers.203 A programme in Spain has developed guidance for the adaptation of workplaces for workers with disabilities.

With regard to training, a German initiative to provide training to disabled workers on occupational safety and health, focusing on young people, was identified.

4.6 Opportunities for EU action

It appears that more active efforts are needed for the integration of disabled people into the workforce and the reintegration of workers who have become disabled. The literature reviewed and interviews conducted for this study emphasise the importance of a comprehensive approach to disability focusing on the two sides of OSH management: prevention and reintegration. Moreover, this approach needs to be closely tied to the management of OSH concerns for ageing workers, due to the relatively higher incidence of disabilities amongst this subgroup.

At EU level, further research and information exchange could support implementation of the European Disability Strategy’s objective to address health and safety at work. There is a strong need for more analytical data on the risks in terms of occupational safety and health for workers with physical or mental impairments (so far research has focused mainly on workplace adaptation). Greater knowledge is also needed on the health and safety issues facing newly disabled workers returning to work. It could also be useful to encourage greater dissemination of existing good practices on accommodating disabled workers with respect to health and safety issues, including promoting the use of suitable tools to assess work-related disability and OSH risks.

It could also be valuable to review the variations between Member States in their definitions of disability, in light of the recent UN Convention and WHO’s ICF. While the elaboration of a definition at EU level is a worthwhile objective, perhaps as important is to ensure that occupational health and safety actions address both workers recognised as disabled and those whose conditions and impairments could lead to disability if adaptations are not made. A charter to protect cancer patients and those with chronic diseases and support their return to work, as called for in the above-mentioned European Parliament’s 2008 Resolution, would help to address relevant issues for many workers with impairments who are not identified as disabled.

5 YOUNG WORKERS

KEY FINDINGS

- Overall, young workers have a 40% higher rate of non-fatal injuries than older workers.
- Young workers are overrepresented in some sectors, such as the hotel and restaurant and wholesale and retail trade sectors. They dominate certain occupations such as hairdressers and call-centre workers, which are associated with specific OSH risks.
- Young workers are more likely to be employed under non-standard forms of contractual arrangements such as part-time or temporary contracts.
- Younger workers have less experience and maturity in their job, which puts them at risk of overestimating their physical capacities or underestimating the safety and health risks associated with their tasks.
- A further concern is that exposure to workplace risks when young can contribute to later disease – this factor is not, however, addressed by worker health and safety surveillance.
- Initiatives in the Member States have sought to raise the awareness of young people and of their employers to workplace health and safety risks. Several initiatives have used web sites. Specific training is another important mechanism. Some initiatives for specific types of workplaces will largely address young workers.
- EU initiatives could further address occupational health and safety within policies addressing young people at large.

5.1 Overview and Socio-Economic Trends

Definition of the group

Following EU OSHA’s definition, this study will consider young workers as those aged 15 to 24, although this is not necessarily a universally accepted definition. The European Foundation for the Improvement of Living and Working Conditions (Eurofound) defines young workers as being aged 16 to 34. The Eurofound approach allows for a distinction between 16 to 24-year-olds undergoing the transition from education to working life and 25 to 34-year-olds who might already have a job but face difficulties linked to their age and lack of experience.\(^\text{204}\)

Socio-economic trends

Young people are under-represented in the workforce in the EU, which is a reflection of lower birth rates in European countries and of the fact that young people are studying longer.\(^\text{205}\) In 2011, Eurostat reports that 35.2% of the 15-24 year olds are employed, in comparison to 78.2% of the 25-54 year olds.


\(^\text{205}\) EU OSHA, OSH in figures: Young workers – Facts and figures, as above, p10
However, youth unemployment in the EU is higher for young workers (20.9% in 2010) than for the rest of the EU workforce (9.6%) and it is particularly high in several Member States, for instance Spain (41.6 %), Lithuania (35.1 %), and Latvia (34.5 %).206

As younger workers are more exposed to unemployment, one of the consequences is that they may feel more under pressure to find a job. This can lead them to working in jobs that are either more physically-demanding than they are capable of, or do not correspond to their qualifications, creating frustration and depression.

**Figure 16 Age distribution by sector, 31 European countries (%)**

In 2005, the sectors that employed most young workers were hotels and restaurants (22.7%) and trade (16.3%). The hotel and restaurant sector employs so many young workers because it offers jobs that require low or no qualifications and can be physically demanding. Its seasonal temporary contracts attract young people still in school or higher education and its poor working conditions and low wages repel older workers who have family responsibilities. Finally, there is also a strong social component that makes working in restaurants and cafés more attractive to younger than older workers.207

The majority of temporary workers are young workers. This is partly explained by the fact that the category “temporary worker” includes those with fixed-term contracts covering training or probation periods (possibly leading to a permanent contract). It also includes students who have part-time fixed-term jobs during their studies. In 2005, 22.2% of young temporary workers had temporary contracts because they could not find a permanent job, 34% had a temporary contract due to education or training, and 10% did not want a permanent contract.208 In 2010 temporary jobs accounted for 40% of total employment among young workers in the EU compared to 13% for the overall working-age population.209


207 EU OSHA, OSH in figures: Young workers – Facts and figures, as above, p36

208 EU OSHA, OSH in figures: Young workers – Facts and figures, as above, p63

The 2005 report on the Fourth European Working Conditions Survey\(^{210}\) indicates that 60% of workers starting employment in a company (many of whom are young workers at the beginning of their working lives) have non-standard contractual agreements such as a fixed-term contract, temporary agency contract, apprenticeship arrangement (or no contract at all).

Similarly, young workers are more likely to be employed part-time than the average workforce. Young people represent 15.5% of part-time employees; moreover, they form 31.2% of part-time employees with temporary contracts. In contrast, only 6.5% of full-time employees were under 25 in 2009.\(^{211}\)

These two phenomena are associated with gradual entry into the job market. It is seen as normal that young workers who are still studying, or who have just finished their education, should be employed under fixed-term or part-time contracts for training reasons.\(^{212}\) However, these forms of employment can have consequences for the safety and health of these young workers.

Young workers (particularly females) are also over-represented in the call-centre work sector, which has been shown to present multiple risk exposures.\(^{213}\)

### 5.2 Risk factors

Young people face both endogenous risk factors reflecting, for example, their lack of experience, as well as exogenous ones related to the sectors in which they frequently work.

#### Summary Table

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#### Endogenous Risk Factors

What particularly sets young workers apart from other workers is the fact that they lack experience and maturity regarding their particular occupation, including the safety and health risks associated with it.\(^{214}\) Statistics suggest that young workers are at a 40% higher risk of non-fatal occupational accidents than older workers\(^{215}\), because they are new to the workplace and its risks. Canadian studies have shown that, among workers aged 15 to 24, more than 50% of all injury claims occurred in the first five months on the job, indicating that lack of experience and training may play a particularly important role for young workers.\(^{216}\)

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\(^{210}\) Eurofound, *Fourth European Working Conditions Survey*, as above, p9


\(^{212}\) EU OSHA, *OSH in figures: Young workers – Facts and figures*, as above, p62

\(^{213}\) EU OSHA, *Gender issues in safety and health at work – A Review, 2003*, as above, p31


\(^{215}\) EU OSHA, *OSH in figures: Young workers – Facts and figures*, p179

In addition, from a psychosocial perspective, young workers can lack the ability to deal with particularly difficult social situations (for instance with angry customers) and can have more difficulty dealing with work pressure and tight deadlines.\textsuperscript{217} Another psychological characteristic of young workers is that they are often eager to please their colleagues and superiors and can be reluctant to speak about their difficulties and to report physical and psychological problems to their hierarchy, for fear of looking inexperienced and of losing their job.\textsuperscript{218}

Young workers may believe that they are physically healthier and stronger than older workers, which explains why they are less reluctant to work in high-risk sectors and are more risk-taking in their occupation. However, carrying out physically demanding tasks often requires training, experience and knowledge of the tools (such as agricultural machinery) and can be easier for a 35 year old worker with 10 years experience than for a 20 year old.\textsuperscript{219} However, because on average they are healthier than older workers and they recover faster, the injuries sustained by young workers can have less severe consequences.

With regard to inexperience, it is important to note that Directive 94/33/EC on the protection of young people at work prohibits young workers to work with harmful exposure to agents, which are "toxic, carcinogenic, cause heritable genetic damage, or harm to the unborn child or which in any other way chronically affect human health" (Art. 7(2)(b)). The rationale is that young people need to be protected due to their lack of experience and absence of awareness of existing or potential risk. Directive 94/33/EC applies only to workers under 18 years old, but inexperience and lack of awareness are characteristic of slightly older workers, as well. Exposure to hazardous substances is therefore an important risk factor that should be taken into account, in particular with regard to young unqualified or inexperienced workers.

An important factor relating to the nature of young workers which must be taken into account when looking at OSH reporting figures for occupational diseases is that many such diseases develop with time. Young workers may be exposed to risks that lead to health problems such as MSDs or cancers – but these do not become apparent until later in their working life. Moreover, exposure to a particular hazard when young can increase the risk of developing work-related diseases at a later stage. For instance, the development of back problems during a young worker's first years of working experience can be a predictor of future back injuries and delayed recovery.\textsuperscript{220}

The duration and level of exposure of young workers to risk factors are key elements to take into account. First of all, there is a discrepancy between the actual physical and mental health of young workers and the risk they face of developing related health problems in the long-run. In addition, young workers are more likely to be exposed to high-risk agents than older workers, as the latter tend to adopt a more cautious attitude towards their health and safety. Understandably, young healthy workers are often selected to carry out riskier jobs than older workers who might present health problems.

\textsuperscript{217} EU OSHA, OSH in figures: Young workers – Facts and figures, as above, p12
\textsuperscript{218} EU OSHA, Preventing risks to young workers: policy, programmes and workplace practices, as above, p6
\textsuperscript{219} Health and Safety Executive, Young people at work website. Available at: http://www.hse.gov.uk/youngepeople/risks/psycho.htm (consulted June 2011)
\textsuperscript{220} C Breslin, et al., Age related differences in work injuries and permanent impairment: a comparison of workers' compensation claims among adolescents, young adults, and adults, as above.
The issue of temporary contracts must also be taken into account. A lot of young workers have short-term contracts and are exposed to certain hazards only on a short-term basis. It is sometimes enough for the development of a disease, especially if several kind of exposures are combined (through several short-term contracts), but this may not be recognized as an occupational disease, as one single cause from one single occupation cannot be established. 221

Young workers’ occupational risk factors can be underreported in the official figures if they are not associated with the time of appearance of a disease, and are thus underrepresented in OSH prevention policies.

With regards to psychosocial risk factors, young workers report a lower job satisfaction than older workers. This is due to a number of factors, including the fact that inexperienced young workers are more likely to have less autonomy in their job and fewer responsibilities. It seems that young workers on average are not exposed to more violence than older workers, however, certain employees in workplaces dominated by young workers, such as call centres, hotels and restaurants and shops, are more at risk of violence from third-parties (i.e. clients and customers). Finally, as mentioned in the chapter on female workers, young female workers are particularly exposed to unwanted sexual attentions. 222

**Exogenous Risk Factors**

Working in the hotel and restaurant sector, young workers face specific risk factors that are related to the physical work environment, as well as the work organisation. This includes risks of burns and injury from using kitchen tools; risks of falls, slips and trips; risks from high temperatures; inhalation of harmful and toxic substances; noise (for instance in loud bars and clubs), etc. Walking and standing, as well as repetitive hand and arm movements, are the most common risk factors reported by young workers relating to the development of MSDs. 223

The psychosocial risks linked to working in the hotel and restaurant sector include stress from superiors and customers and, at peak time periods, harassment and abuse from customers and colleagues, lack of autonomy and control. Split working times (for instance between lunchtime and dinnertime) can distort the perception of working hours and disrupt private life. 224

Two very important sectors with high levels of young female workers are hairdressing and working in call centres. The main risk factor that hairdressers face is exposure to hazardous substances, specifically the chemicals used in the formulations they mix and apply for hair colorations and treatments. This exposure creates occupational skin diseases (such as dermatitis) in 70% of hairdressers. Respiratory irritation and reproductive disorders, although rarer, should also be considered. 225 The hazards faced by call-centre workers are multiple. They include prolonged sitting, high background noise, inadequate headsets, poor ergonomics, low job control, high time pressure, and high mental and emotional demands. As reported by EU OSHA, “MSDs, varicose veins, nose and throat diseases, voice disorders, fatigue, stress and burnout are observed in call centre agents.” 226

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221 EU OSHA, *OSH in figures: Young workers – Facts and figures*, as above, p148
222 EU OSHA, *OSH in figures: Young workers – Facts and figures*, as above, p128
223 EU OSHA, *OSH in figures: Work-related musculoskeletal disorders in the EU — Facts and figures*, as above, p114
224 EU OSHA, *OSH in figures: Young workers – Facts and figures*, as above, p39
225 Ibid., p53
226 EU OSHA, *Expert forecast on emerging physical risks related to occupational safety and health*, Facts 60
In contrast, high-risk sectors, such as agriculture, construction and manufacturing are dominated by young men. These are also the sectors where the highest numbers of accidents (fatal and non-fatal) are reported\(^{227}\) and where young workers are more at risk of developing MSDs from awkward postures and carrying heavy loads. Because of their young age and relatively good physical health, young workers are more likely to be given the physically hardest tasks. This means that on average young workers are more exposed to MSDs risk factors than the rest of the workforce. In addition, because of their inexperience and lack of training, they are more likely to adopt unadjusted positions, which favour the appearance of MSDs.\(^{228}\)

Noise and vibration are two hazards particularly experienced by young workers because of the typical sectors and jobs in which they are predominant. Workers in hotel, restaurants and call centres can suffer from acoustic shock injuries. The construction industry is affected on a large scale by hearing problems, which can go from temporary damage to the ear, to noise-induced hearing loss (NIHL), dizziness and impaired balance.\(^{229}\) Vibration is also a common OSH problem of construction workers and a slightly higher proportion of young workers report being exposed to vibration (9.8% compared with 8.7% of the total workforce in 2000). In addition to the usual health problems caused by exposure to vibration, young workers may be at greater risk of damage to the spine because the strength of their muscles is still in development.\(^{230}\)

These physical risks may not affect seriously workers when they are young: one important concern, however, as the next section underlines, is that exposure when young will affect workers later in life.

Finally, younger workers are less concerned than older workers about a potentially unstable work-family balance. Thus, they are less reluctant to accept shift work (22.4% of young workers accepted shift work compared with 19.3% of the total workforce in 2000)\(^{231}\), weekend work and overtime, especially since these particular working hours are usually better paid than “normal” working hours.

Working evening and night shifts has consequences on the safety and health of workers. It has been shown that working at night affects concentration and increases mental and physical fatigue, which in turn increases the risk of accidents.\(^{232}\) Biological disturbances linked to working night shifts include digestive problems, sleep disturbance, physical and mental fatigue as well as cardiovascular problems.\(^{233}\)

### 5.3 Health Outcomes

According to the ESAW (European Statistics on Accidents at Work) data, and as illustrated by Figure 17, young workers have higher non-fatal accident rates compared to the average working population, but a lower incidence rate of fatal accidents. In 2003, the incidence rate of non-fatal accidents at work per 100,000 workers was more than 40% higher across all sectors among those aged 18–24 years compared to the total workforce.\(^{234}\)

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\(^{227}\) EU OSHA, OSH in figures: Young workers – Facts and figures, as above, p132

\(^{228}\) EU OSHA, OSH in figures: Work-related musculoskeletal disorders in the EU – Facts and figures, as above, p42

\(^{229}\) EU OSHA, OSH in figures: Young workers – Facts and figures, as above, p85

\(^{230}\) Ibid., p89

\(^{231}\) Ibid., p122


\(^{233}\) EU OSHA, OSH in figures: Young workers – Facts and figures, as above, p124

\(^{234}\) Ibid., p133
With regard to occupational diseases, acute diseases, such as allergic or toxic reactions, are particularly prevalent (see Figure 18). This is explained by the fact that chronic diseases typically develop at a later stage in life, meaning that acute illnesses assume a higher importance.\(^{235}\)

According to the LFS ad hoc module 1999, young workers are mainly affected by skin problems (16.32% of all young workers), headache and eye strain (11.23%), infectious diseases (10.76%) and pulmonary disorders (9.46%).

\(^{235}\) EU OSHA, *OSH in figures: Young workers – Facts and figures*, as above, p149
Although, as mentioned above, young workers are more likely to be affected by risk factors encouraging the development of MSDs, they have been exposed to these risks for a shorter period of time and they are on average in better physical condition than older workers. This explains why, overall, young workers suffer fewer occupational diseases than older workers, including fewer MSDs. Two remarks must be made about these statistics, however. First of all, the long-term effects of these occupational exposures may not be seen until later in life and, secondly, young workers may feel pressure to come to work although they are sick, meaning that their health problems would not necessarily be reported in occupational statistics.

5.4 EU legal and policy framework

Young people under the age of 18 are covered by Directive 94/33/EEC, which provides that Member States must prohibit the employment of children and ensure that the employment of adolescents is strictly controlled and supervised. Article 6 of the Directive states that the employer must protect the health and safety of young workers on the basis of an assessment of the hazards in connection with their work. This assessment must take into account several different factors including the “nature, degree and duration of exposure to physical, biological and chemical agents” and the “form, range and use of work equipment, in particular agents, machines, apparatus and devices, and the way in which they are handled”.

In addition, as mentioned previously, Article 7(2)(b) prohibits young workers under 18 to work with certain harmful substances.

The 2007-2012 EU Strategy for Health and Safety at Work mentions young workers as a vulnerable category of workers. It also highlights that, although OSH policies are strongly affected by the fact that the working population is ageing, young workers’ health and safety also deserves specific attention and dedicated policy measures.

In 2006, the EU OSHA carried out the “Safe Start” campaign targeting young workers under the age of 25 who were either starting employment for the first time after having left school or college, undertaking vocational training placements or work experience, or still in full time education doing holiday or weekend jobs. It aimed at both the workplace and the education and schools sector. It was the only campaign carried out by the Agency that targeted a specific category of workers. An evaluation of the campaign, carried out in 2008, showed however that most Member States found it difficult and not necessarily in line with their national health and safety strategies to focus only on one priority group instead of the whole workforce.

5.5 Initiatives in the Member States

Many Member States' health and safety strategies have focused on regulating young people’s working conditions, training and working hours. A number of countries have nonetheless implemented specific initiatives concerning the safety of young workers, including Belgium, France and the UK. Sweden and Denmark are among those that have developed specific guidance on risk prevention, for instance for health risks related to noise at the workplace. Some countries have developed guidance on OSH prevention for employers in specific occupations in which young workers are overrepresented (e.g. hairdressers, addressed in Sweden and Denmark). Several countries have set up training programmes and management schemes are also widely available. No initiatives, however, have targeted young night shift workers.

The review of Eurofound and EU OSHA reports provides further information on initiatives targeting young workers. Many of these focus on raising awareness and providing training. For example, to raise awareness of occupational safety and health issues among young people, national agencies in both Belgium and the UK have set up specific web sites. In Sweden, a trade union helpline has been set up for young people on temporary, summer jobs. In Denmark, interactive software has been used to train young people working in the retail sector. A cross-European project developed a model for educating teenagers about hazards in the workplace. Many of the examples of training programmes and guidance on prevention of OSH risks for young workers and their employers that have been identified in the literature review focus on specific companies and sectors (e.g. hairdressers and rock clubs).

Although legislation has been implemented in some Member States to protect young people in employment, such as, in Hungary, allowing them longer work breaks if they work more than 4.5 hours a day, youth employment regulation in the EU has not been a priority in the collective bargaining process. Most advances have targeted minimum wage, training and working hours. The two latter categories particularly have had positive consequences on young workers’ health and safety. In Germany, the dual VET system, which combines vocational training in schools and in companies and recognise the skills acquired during training, has given birth to 121 collective agreements. In the Czech Republic, young employees cannot perform overtime or work night shifts. Similar restrictions exist in other Member States (e.g. Hungary, Latvia, Slovenia) but they apply to workers under 18, whereas the Czech legislation applies to “young people” up to the age of 25 who are also prohibited from doing any work which would endanger their health or expose them to increased risks of injury.

5.6 Opportunities for EU action

The review of existing good practice highlights the importance of training and awareness raising in terms of addressing occupational health and safety issues affecting young workers. The measures implemented include: educational programmes targeting students; initial training for new workers; ensuring that young people on temporary contracts receive adequate training; awareness raising of the risks for sectors where young people are strongly represented (including psychosocial risks in sectors such as hotels and restaurants).

EU web sites directed at young people, such as the European Youth Portal, could also be used to raise awareness. The EU supports training for young workers through the European Social Fund: it would be useful to consider whether the incorporation of OSH issues therein could be further expanded. The EU Strategy on Health and Safety at Work also calls for integration of OSH within educational programmes: it would be useful to review progress in this area to evaluate if further initiatives are needed.

The “Youth on the Move” flagship initiative under the EU2020 Strategy highlights the active inclusion of young people at risk of unemployment as well as the necessity of integrating young people with disabilities in the labour market, but does not address occupational safety and health.

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239 Ibid., p11
240 Ibid., p24
241 Ibid., p26
It should also be considered whether young workers over 18 deserve greater protection from exposure to harmful substances and work processes, because of their relative lack of experience and maturity, by extending the protection provided by Directive 94/33/EEC.

In this regard, further research into young workers’ occupational health problems would be recommendable, including on the subjective perception of their health, as this is usually a good indicator for the development of medical problems. Preventive occupational medicine should focus on the type and duration of exposure of young workers to certain risk factors rather than on existing medical conditions, as the consequences of such exposure usually develop only later in life.

Finally, research and guidance on age management, as mentioned in Chapter 3 on ageing workers, should also pay attention at young workers, in order to avoid a transfer of risks from older to younger workers.

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6 MIGRANT WORKERS

**KEY FINDINGS**

- While a minority of migrant workers hold high-skilled jobs, many have jobs that are “dirty, dangerous and demanding” and consequently face high risks of work-related accidents and disease.

- Language and cultural barriers also contribute factors to higher risks for migrant workers.

- While EU-wide statistics are not available, country studies confirm that migrant workers suffer higher levels of work-related accidents and disease. Health and safety risks are believed to be higher for undocumented migrant workers although, because of their situation, there is a lack of data on their conditions.

- The European Strategy 2007-2012 on health and safety at work highlights risks to migrant workers, especially in sectors such as agriculture, construction and health care, and calls for the provision of better information.

- Several Member States have sought to address safety and health for migrant workers through awareness raising and training, often in native languages. Other mechanisms seek to favour the better integration of migrant workers in the workplace, for example through mentoring programmes that also address occupational health and safety.

- Policy options at EU level include actions targeting sectors such as agriculture and construction, which employ a high number of migrant workers in high-risk jobs. As previously mentioned, the EU could also close the gap in legislation for domestic workers, an important sector for women migrants.

6.1 Overview and socio-economic trends

The migrant population in general, and by extension the migrant working population, has been increasing very fast in the EU over the last 15 years. The OECD estimates that there has been a 26.1% overall increase of inflow of foreigners in EU countries between 2000 and 2004 (at least for those countries where data are available).

In the EU, two groups of migrant workers can be identified: EU nationals working in another EU Member State and immigrants from outside the EU. In terms of resident population, on 1 January 2009 non-nationals accounted for 6.4% of the total EU population (31.9 million): 2.3% came from other EU Member States, and 4.1% came from third-countries. With regard to origins, citizens of Romania and Poland are the most numerous migrants within the EU, while citizens of Morocco and Turkey are the most numerous from outside EU Member States.

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246 Ibid., p47
Neither EU OSHA nor Eurofound, however, highlight differences between migrant workers from the EU and migrant workers from outside the EU in their analyses: they focus rather on differences in qualifications, distinguishing between highly-qualified migrant workers who travel to EU Member States to work in high-skill jobs, and less qualified migrant workers who work in low-skilled and low-paid jobs (though, as described below, many migrants work in jobs below their skills).

Another important category is that of undocumented third-country immigrants (see the box below). Little information is available on their circumstances, however.

Undocumented Migrants

As only immigrants who have valid residence and work permits are accounted for in statistics, it is very difficult to analyse the situation of undocumented (illegal or irregular) immigrants. The EU-funded 'Clandestino' project has estimated that in 2008, between 1.9 and 3.8 million third-country nationals in the EU did not have legal status. Studies have estimated that at the beginning of the last decade, between 400,000 and 500,000 illegal migrants entered the EU each year to work mainly in the construction, farming, hotel and restaurant sectors, as well as the cleaning and domestic work sectors.

The number of undocumented migrants is particularly high in the Southern Member States (e.g. Italy, Spain and Greece). This can be explained by a number of reasons, including the existence of larger informal economies in these Member States, as well as the economic benefits for employers of this undocumented workforce.

The situation of undocumented migrants with regards to occupational health and safety is a very important yet very difficult issue to assess. There is very little statistical data on the types of occupations held by undocumented migrants or on their working conditions.

However, incidental information suggests that the working conditions of undocumented migrants are much worse than those of other workers. Because of their precarious situation, undocumented migrants accept any kind of jobs and occupy most of the time the lowest segment of the labour market. Many such jobs are found in the agricultural and construction sectors. Many women migrants work in domestic service.

Undocumented migrants are less likely to complain of bad working conditions for fear of deportation. The issue of unregistered temporary work agencies who exploit undocumented workers under the false promise of good pay, conditions and housing is a particular concern in some EU countries.

Socio-economic trends

In 2008, immigrants to EU Member States were, on average, younger than the population of their country of destination. On 1 January 2009, the median age of the total EU population was 40.6 years. In contrast, the median age of immigrants in 2008 was 28.4 years.

247 According to the Platform for International Cooperation on Undocumented Migrants, third-country undocumented immigrants are migrants from outside the EU staying in an EU Member State without a residence permit authorising them to regularly stay in their country of destination.
249 Clandestino research project, Comparative Policy Brief - Size of Irregular Migration, October 2009; available at: http://irregular-migration.hwwi.de
251 EU OSHA, Literature Study on Migrants, European Risk Observatory, Luxembourg, 2007, p7
252 Ibid., p38
84% of immigrants are of working age, between 15 and 64, as illustrated in Figure 19 below. To some extent this probably reflects migration through economic necessity. However, particularly at the lower end of this age range, opportunity also plays a part, with younger workers having fewer ties to prevent them from moving between countries to seek employment.

**Figure 19 Age structure of the population in January 2009 and of immigrants in 2008, EU27**

With regard to educational levels, the situation of the EU migrant population is somewhat paradoxical. Both workers with high formal education (completed tertiary education) and with low formal education (i.e. only primary education) are overrepresented in the general migrant population: 28.3% of migrants from other EU countries and 25.8% of migrants from third countries have high formal education compared to 41% of migrants from other EU countries and 37.9% of migrants from third countries with low formal education.\(^{254}\)

Immigrant workers tend to work in two quite different types of sectors: high-skilled information technology and professional jobs or the “three D-jobs”\(^ {255}\) (dirty, dangerous and demanding). For the purpose of this study, only the second category will be of interest, as migrant workers in the first category are qualified workers facing relatively few health and safety risks directly connected to their status as immigrant (or non-native of the country where they live).

As mentioned by the International Labour Organisation in its report “Toward a fair deal for migrant workers in the global economy” (2004), most migrant workers come to a country “to fill unskilled jobs in those segments of the labour market vacated by native workers who move on to better jobs”\(^ {256}\). Migrants find themselves working in more difficult jobs, with usually worse working conditions, than native workers.

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\(^{255}\) EU OSHA, *Literature Study on Migrants*, as above, p21

According to EU-OSHA, the “three D-jobs” are found mostly in the agriculture and horticulture, construction, health care, household, transport and food sectors.\(^{257}\)

The OECD and EWCO (European Working Conditions Observatory) show that, at least in the EU-15, migrant workers are overrepresented in the agricultural sector, the manufacturing, mining and energy sector and the construction sector. The OECD data also indicate that migrant work has so far been spreading mostly in the unskilled jobs of the services sector (in particular hotels and restaurant and household services), while skilled jobs in the service sector, such as in education or in the administration, are almost never mentioned in the Member States as major sources of employment for migrant workers.\(^{258}\)

Depending on whether or not they have been granted long-term or permanent residence, migrant workers can be under great pressure to find a job and, consequently, to accept any kind of work. This includes working in high-risk sectors (where the frequency of accidents is higher) or on assembly lines in the manufacturing sector.\(^{259}\)

Many migrant workers work in the agricultural sector on short-term and precarious contracts, as they are mostly coming to the EU for the picking and harvesting seasons. This phenomenon, known as “labour tourism”, also applies to sectors other than agriculture (such as catering, construction, household services and manufacturing) and is associated with very poor working conditions.\(^{260}\) A difficulty associated with these types of jobs, in addition to the precarious working conditions, is the lack of data on the health situation of these workers. As these contracts are almost exclusively short-term (when contracts exist at all), the record of health problems of these workers into the national compensation systems is virtually nonexistent.

In addition to working in high-risk sectors or low-skilled jobs, migrant workers are more likely than native workers to be employed under temporary or, more generally, atypical contracts. Migrant women, like native women, are also more likely to work part-time than men.\(^{261}\) These trends reflect a more unstable position for migrant workers, associated with the risks of temporary or part-time employment, such as less training. In Belgium, Finland and Italy, it is well-documented that migrants get jobs with much less employment stability, which obviously reduces their opportunities for career advancement.\(^{262}\)

In the first half of 2010, the EU-wide unemployment rate for non-EU nationals was about 20%, compared to an EU total of just under 10%.\(^{263}\) High unemployment amongst immigrants is likely to undermine their bargaining power in the labour market.

The issue of the market segregation of migrant workers is also reflected in the situation of those nationals with a foreign background and nationals with a different ethnic affiliation. These people have the nationality of the country they work in but, because of their foreign background or ethnic origin, they can be discriminated against on the labour market, as reported by the Fundamental Rights Agency in its 2010 “Data in Focus” report on Multiple Discrimination.\(^{264}\)

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\(^{257}\) EU OSHA, Literature Study on Migrants, as above, p21

\(^{258}\) Eurofound, Employment and working conditions of migrant workers, Dublin, 2007, p29

\(^{259}\) EU OSHA, Literature Study on Migrants, as above, p24-25


\(^{261}\) Eurofound, Employment and working conditions of migrant workers, Dublin, 2007, p32

\(^{262}\) Ibid.


With regard to migrant women, the issue of domestic workers should also be mentioned. There are several reasons that explain why domestic work is a growing economic sector, including a greater need for elderly care as the population ages and a growing need for home and child care as female employment increases. Most domestic workers are migrants, some of them undocumented. It is estimated that 70-80% of the jobs in this sector are undeclared: for instance, the number of undeclared employees in Austrian households is estimated to be as high as 300,000, whereas only 5,000 workers are registered with the authorities there. This makes it very difficult to know the total number of domestic workers in the EU27.

The sector of domestic care is relevant to our study because its workforce is mainly migrant women, who are exposed to specific health and safety risks because of the type of tasks they carry out and the lack of OSH prevention. The work of Migrant Domestic Workers (MDW), as they are sometimes referred to, includes childcare, eldercare, cooking and cleaning of households.

### 6.2 Risk factors

#### Summary Table

| Endogenous Risk Factors | - Language barriers  
|                         | - Over-qualification  
|                         | - Fear of authorities leading to underreporting of OSH problems  
|                         | - Bullying  
| Exogenous Risk Factors | - Prevalence in high-risk sectors and "3-D" jobs  

#### Endogenous Risk Factors

One of the main characteristics that differentiate migrant workers from native workers as regards OSH issues are cultural ones such as language, traditions and values. Language in particular is an important factor to take into account. When they cannot understand or read the language of their host country, migrant workers may not be able to respect the OSH rules in place for their jobs and are more at risk with regards to accidents and injuries. Statistics in different Member States (France, Germany and Belgium) show that the rate of accidents and injuries is higher among non-nationals than among nationals.

The language barrier is a major obstacle for migrant workers for communication purposes, especially in noisy working environments. Communication difficulties are an issue not only for day-to-day work but also for training. For some tasks, such as operating heavy machinery or using certain pesticides, understanding the instructions corresponding to the product or tool used is crucial for the safety of the worker. It has been shown that fatal and non-fatal accidents decrease with the increase in duration of residence in the country. This suggests that, for migrant workers, learning the language and getting acquainted with the culture of the host society diminishes the risk of occupational incidents. Anecdotally, where they employ a sizeable minority of non-native speakers, some employers have been known to counter such problems by presenting safety information in their native languages, including both written instructions (such as safety notices) and training.

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On the question of qualifications, Eurofound’s national reports from Denmark, Finland, France, Germany and Slovenia on the employment and working conditions of migrant workers list low educational qualification as a key factor which hinders labour market opportunities of migrant workers.\textsuperscript{269} However, as we have seen previously, a large share of migrant workers are highly qualified. But even when they have the same level of qualifications or are more qualified than nationals, migrant workers often do not find jobs that reflect their level of qualification. Figure 20 presents data from different EU Member States on the issue of over-qualification.

**Figure 20 Over-qualification rates of native and foreign-born population, EU27, 2009 (%)**

![Over-qualification rates of native and foreign-born population, EU27, 2009 (%)](image)

*Note:* Given differences in educational systems and qualifications between countries, the result must be interpreted with caution.


There are several reasons that explain this phenomenon, the first of which is that job markets have a tendency to underestimate migrants’ qualifications. The language barrier and their poor knowledge of the national employment market often means that migrant workers cannot put efficient employment strategies in place and are undervalued on the market\textsuperscript{270}.

Labour market discrimination is also a major contributor to the fact that migrant workers face over-qualification.\textsuperscript{271} In the EU, whereas 19% of native-born population with tertiary education (higher education level) have a job requiring a lower-level qualification, this number increases to 34% for immigrant workers. The proportion of immigrants from outside the EU who face over-qualification is 37% (compared to 29% for workers from another EU Member State).\textsuperscript{272}

Over-qualification means that workers who could have found higher-skilled jobs find themselves in the lowest-skilled jobs, where occupational health and safety risks are greater, trainings are scarcer and prospects of career advancement inexistent.\textsuperscript{273} In addition to being exposed to greater physical risks, this can lead to psychosocial problems, such as the development of a feeling of frustration and depression in these workers.

Country studies have also shown that migrant workers tend to take excessive risks to show that they are keen to work and to please their superiors.\textsuperscript{274} In parallel, there is evidence that migrant workers under-report their occupational accidents and diseases to authorities.

\textsuperscript{269} Eurofound, *Employment and working conditions of migrant workers*, as above.
\textsuperscript{270} EU OSHA, *Literature Study on Migrants*, as above, p24
\textsuperscript{271} K. Wren, P. Boyle, *Migration and work-related health in Europe*, as above, p20
\textsuperscript{272} European Commission, *Demography Report*, as above, p53
\textsuperscript{273} Eurofound, *Employment and working conditions of migrant workers*, as above, p26
\textsuperscript{274} EU OSHA, *Literature Study on Migrants*, as above, p27
This could be explained by a certain desire from migrant workers (whether documented or undocumented) to stay away from authorities.\textsuperscript{275} It has also been shown that, because they lack language skills and they do not know the national health care system, migrant workers tend to use the health services at a very late stage, which contributes to the appearance of chronic diseases.\textsuperscript{276}

Surveys in Member States have illustrated that migrant workers experience more workplace bullying than native workers. Racial abuse because of their ethnic origins is the most frequent type of bullying faced, but they can also be harassed because of differences in norms and values, or for intimidation purposes. The health care sector seems to be particularly affected by bullying and harassment.\textsuperscript{277} This is not surprising, as the majority of workers who are being bullied or harassed are women and they are predominant in the health care sector. Migrant female workers can therefore be considered to be particularly vulnerable when it comes to workplace harassment.

The above-mentioned ILO’s report “Towards a fair deal for migrant workers in the global economy” shows that many of the migrant workers overwork their safety and suffer from poor general health, and so are more susceptible to occupational injuries and work-related diseases.\textsuperscript{278}

Undocumented migrant workers work outside the official market and therefore do not report health problems to any kind of authority or feature in any statistics. It can be assumed, however, that their situation with regards to health and safety at work is worse than that of legal migrants, because of a lack of social stability and security and difficult access to health services.\textsuperscript{279}

\textbf{Exogenous Risk Factors}

Although it has been shown in studies that migrant populations in Europe appear to be in general more at risk of contracting a number of diseases than native populations\textsuperscript{280}, the issue of health and safety for migrant workers is largely connected to the type of jobs they have and the sectors they work in.

Migrant workers are more exposed to certain occupational hazards because they are over-represented in physically-demanding sectors and are often relegated to the most hazardous tasks.\textsuperscript{281} Vibration and noise for instance are two risk factors that are much more common in the construction, manufacturing, mining, agriculture and fishing sectors. Whole body vibration (WBV) and hand-arm vibration (HAV) can cause neurological and motor disorders in the hands and fingers as well as lower back pain.\textsuperscript{282} Exposure to noise can present serious health problems to workers, including hearing loss, effects on the cardiovascular system, work-related stress and increased risk of accidents (because it makes it more difficult to communicate and hear).\textsuperscript{283} It also appears that, because of the type of jobs they have, migrant workers might be more at risk of musculoskeletal disorders than native workers, although the evidence for this is unclear.\textsuperscript{284}

\textsuperscript{276} EU OSHA, \textit{Literature Study on Migrants}, as above, p34
\textsuperscript{277} \textit{Ibid.}, p31
\textsuperscript{279} EU OSHA, \textit{Literature Study on Migrants}, as above, p7
\textsuperscript{280} M. Carballo, A. Nerukar, “Migration, Refugees, and Health Risks”, as above.
\textsuperscript{281} Eurofound, \textit{Employment and working conditions of migrant workers}, as above, p37
\textsuperscript{282} EU OSHA, \textit{Prevention of vibration risks in the construction sector}, E-Facts 19
\textsuperscript{284} EU OSHA, \textit{Literature Study on Migrants}, as above, p33-34
Migrant workers who work in the agricultural sector are employed to perform a wide variety of frequently manual tasks which can include digging, spreading manure or fertilizers, watering and weeding, picking fruit, vegetables and various plants, feeding animals, cleaning animal quarters and farm ground, etc.\(^{285}\)

Chronic exposure to pesticides and other toxic substances, including carcinogens, mutagens and reprotoxins, has been linked to depression, neurological disorders and miscarriages.\(^{286}\) In addition, the health problems linked to exposure to hazardous substances are likely to develop over time, long after the exposure. This can be an issue for seasonal migrant workers, who only stay in the country for a short period of time and might develop health conditions only once they are back to their country of origin, making the recognition of their problem as an occupational disease impossible.

Regarding musculoskeletal disorders, the EU OSHA reports that almost 60% of workers in agriculture and fishing are exposed to poor or awkward postures for at least half of their working time, which is an aggravating factor for the development of MSDs.\(^{287}\)

Even when they don’t work in a “three D” type of job, migrant workers are more likely to accept shift, week-end work or overtime work for fear of losing their jobs, for economic reasons or because it is the only type of job available to them\(^{288}\). With regard to work organisation, migrant workers are likely to face more difficult working conditions than native workers. In the Netherlands for instance, migrants more often report working long hours, working on week-ends or overtime and doing shift work, especially at night.\(^{289}\) It was shown that these workers were more often involved in accidents.

Migrant workers in the EU are also more likely to work on fixed-term contracts, and less likely to be kept in employment in the case of economic downturns.\(^{290}\) This situation leads to a high-level of job insecurity and stress related to the uncertainty of knowing whether or not they will be working in the future. In addition, although migrant workers are a particularly vulnerable population, they are often weakly represented by trade unions. This can be explained in some Member States because migrant workers are concentrated in low-skilled jobs within the service sector (such as household services or hotel and restaurant jobs), where unionisation is very low for all workers.\(^{291}\)

The particular situation of migrant domestic workers should be highlighted. Discussions on the working conditions of domestic workers focus mostly on the question of physical and psychological abuses, which, according to specialised organisations, can go as far as sexual assaults and denied freedom of movement. The UK NGO Kalayaan conducted a study on the working conditions of 775 domestic workers, illustrating the conditions endured by some domestic workers (see Table 7 below).

However, systematic and EU-wide, or even country-wide, statistical data on medical physical and mental health problems suffered by domestic workers are missing.


\(^{286}\) M. Carballo, A. Nerukar, “Migration, Refugees, and Health Risks”, as above.


\(^{288}\) EU OSHA, \textit{Literature Study on Migrants}, as above, p24-25

\(^{289}\) Eurofound, \textit{Employment and working conditions of migrant workers}, as above, p37

\(^{290}\) M. Sargeant, \textit{Health and safety of vulnerable workers in a changing world of work}, as above.

\(^{291}\) Eurofound, \textit{Employment and working conditions of migrant workers}, as above, p38
### Table 7 Abuse suffered by domestic workers in the UK (%)

<table>
<thead>
<tr>
<th>Abuse</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial of time off from duties</td>
<td>91</td>
</tr>
<tr>
<td>Psychological abuse</td>
<td>88</td>
</tr>
<tr>
<td>Not paid regularly and/or less paid than agreed in contract</td>
<td>82</td>
</tr>
<tr>
<td>Passport withheld</td>
<td>63</td>
</tr>
<tr>
<td>No regular food</td>
<td>61</td>
</tr>
<tr>
<td>No bedroom</td>
<td>51</td>
</tr>
<tr>
<td>No bed</td>
<td>43</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>38</td>
</tr>
<tr>
<td>Denied freedom of movement</td>
<td>34</td>
</tr>
<tr>
<td>Sexual assault or rape</td>
<td>11</td>
</tr>
</tbody>
</table>

**Source:** Kalayaan, quoted in ETUC, *Out of the shadow: Organising and protecting domestic workers in Europe – the role of trade unions*, November 2005, p16

#### 6.3 Health Outcomes

As stated before, many migrant workers are found in “three-D jobs”, including jobs in agriculture, in elementary occupations\(^{292}\), and construction: throughout such jobs, there is a high level of accidental injuries.

EU-wide data on migrant workers have rarely been found. EU OSHA and Eurofound have, however, cited several country studies in their reports on the working conditions of migrant workers. In Austria, for example, “37% of migrant workers feel affected by poor health conditions at work, compared with only 16% of Austrian workers”. In Germany, a study of Turkish employees with physically demanding jobs in high-risk sectors found that they had higher levels of several diseases closely linked to working conditions, including noise-induced hearing loss, silicosis, tenosynovitis and asbestosis.\(^{293}\)

A Greek study conducted in 2009 showed that the risk of occupational accidents is 66% higher for migrant workers than for native workers.\(^{294}\) In the Friuli Venezia Giulia region of Italy, a recent study found that the injury rate for permanent workers born outside of Italy was about 60% higher than permanent workers born in the country.\(^{295}\)

In the US, studies have shown that agricultural workers, a large number of whom are migrant farm workers, can be affected by occupational dermatoses, acute injuries and chronic low-grade back and joint trauma.\(^{296}\) Moreover, official data may under-represent the scale of the problem, given the reported tendency of migrants to avoid contact with government agencies.\(^{297}\)

Cleaning workers, whether in private homes or in industry, are a particularly vulnerable category of workers. According to a survey carried out by the European Federation of Cleaning Industries in 2006 and covering 20 countries, cleaning workers (in industry) were at 77% women and at 30% migrant workers (compared to 5.2% of the total EU workforce).\(^{298}\)

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\(^{293}\) EU OSHA, *Literature Study on Migrants*, as above, p33


\(^{296}\) G. Rust, *Health Status of Migrant Farmworkers: A Literature Review and Commentary*, as above.

\(^{297}\) G. Rust, *Health Status of Migrant Farmworkers: A Literature Review and Commentary*, as above.

They can be particularly exposed to hazardous substances, with sometimes dramatic consequences on their health. In extreme cases, their exposure to toxic products such as bleach or stain removers can cause multiple chemical sensitivity syndrome leading to partial or total incapacity to work.

6.4 EU legal and policy framework

In its Communication on Immigration, Integration and Employment, the European Commission recalls that migrant workers are “over-represented in risky sectors of employment, in undeclared work of low quality” and dedicates a paragraph on the difficulties for migrant workers to access health services, but does not mention specifically occupational health risks.

The European Strategy on Health and Safety at work 2007 – 2012 includes migrant workers in the list of workers overexposed to occupational risks and mentions “particularly dangerous” sectors such as construction, agriculture and health care, in which migrant workers are overrepresented. Among the recommendations given for a better implementation of OSH legislation, “distribution of information and guidelines written in simple language” can be seen as targeting particularly migrant workers who are more likely to have difficulties to understand complex OSH requirements in a foreign language.

On the issue of posted workers, the Posting of Workers Directive (Directive 96/71/EC) guarantees that the terms and conditions of employment concerning health and safety at work that apply to workers in a certain Member State must also apply to workers sent to the Member State by their employer on a temporary basis in the framework of the transnational provision of services.

As regards undocumented workers, the so-called Employer Sanctions Directive prohibits the hiring of illegal workers and calls for Member States to establish financial sanctions on employers that knowingly do so. Its provisions call for stronger sanctions in cases of ‘particularly exploitative working conditions’, defined to include situations that affect workers’ health and safety.

EU legislation on health and safety at work from the very early days excluded domestic workers from its scope. Council Directive 89/391/EEC defines the workers covered by its provisions as follows: “worker: any person employed by an employer, including trainees and apprentices but excluding domestic servants”.

A 2005 report by the European Trade Union Confederation shows that 17 Member States out of the 19 reviewed had already taken measures to regulate domestic workers’ working conditions. One Member State had done so through a collective agreement, while 12 Member States had included specific provisions on domestic workers in their legislation. Four Member States had both reached collective agreements and passed legislation on this issue.

At the international level, the 100th Session of the International Labour Conference adopted on 16 June 2011 a Convention supplemented by a Recommendation concerning decent work for domestic workers. It states that every worker covered by the Convention’s definition of “domestic worker” has a right to decent working conditions.

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300 Directive 2009/52/EC providing for minimum standards on sanctions and measures against employers of illegally staying third-country nationals
301 ETUC, Out of the shadow: Organising and protecting domestic workers in Europe – the role of trade unions, November 2005, p.18
This includes core labour standards, freedom of association, representation and collective bargaining, social security, non-discrimination, protection against abuses and harassment, maternity protection, etc. The Convention also highlights the issue of migrant domestic workers and encourages Members to cooperate in order to ensure that the provisions of the Convention are effectively implemented.

With regard specifically to health and safety at work, Article 13 of the Convention states that “every worker has the right to a safe and healthy working environment” and that it is up to member countries to take effective measures to ensure the occupational safety and health of domestic workers. The Recommendation specifies that these measures should include making information available to members of the households on good practices in the employment of domestic workers, providing for a system of pre-placement visits to the households, developing training programmes and disseminating guidelines of OSH requirements.

On 12 May 2011, the European Parliament has adopted a resolution in support of the initiative of the ILO. In particular, it called on all Member States to ratify and implement the Convention quickly, highlighting that it will address the needs of “one of the most vulnerable categories of worker”. The Parliament also recalled that the specific problems faced by domestic migrant workers, especially undeclared migrants, should be carefully considered and tackled, in particular through measures allowing the most disadvantaged to have effective access to the formal labour market.303

The adoption of the REACH and CLP regulations in 2006 and 2008 respectively is expected to have effect on the exposure of migrant workers to hazardous substances: in particular, the adoption of the Globally Harmonized System for the classification and labelling of hazardous substances under the CLP regulation allows migrant workers who do not speak the local language to understand the type of risk they face through the use of universally recognized pictograms. This can be valuable for those who handle or are exposed to hazardous substances, such as migrant agricultural workers.

6.5 Initiatives in the Member States

The review of national health and safety strategies shows that there is wide recognition of the issues related to migrant workers throughout Europe, with close attention in some national strategies such as in Spain and the UK.

Specific initiatives have been implemented to address the difficulties faced by migrant workers. In Austria, a successful mentoring programme bringing together native and migrant workers has offered the opportunity to increase working and living integration of migrants. Many national authorities have developed training courses addressing occupational health and safety issues, whether targeting categories of workers (such as seasonal workers in Ireland) or specific sectors (such as the construction sector in Spain or the food industry in the UK). Many countries or companies have developed easy-to-understand OSH packages whether by using simple language (as in Belgium), multilingual websites (UK) or pictograms (Ireland).

Union representation can also play an important role. In 2004, the German Trade Union for Building, Forestry, Agriculture and the Environment founded the European Migrant Workers Union, whose aim is to address the situation of seasonal workers in all sectors, and particularly construction and agriculture. Initiatives at company level (see Annex 1) include mainly developing guidance or manuals with prevention tips, implementing mentoring or “godfather” schemes and providing training in different languages.

6.6 Opportunities for EU action

The review has identified a range of factors that affect the health and safety of migrant workers. One key issue is the type of occupations these workers hold and the sectors they work in, such as agriculture and construction. Domestic work and cleaning services are also a concern, in particular for women migrants. Language and cultural barriers are another key area leading to increased risks. Undocumented migrants may face higher risks in the workplace.

In view of these issues, there are several opportunities for the EU institutions and major stakeholders in the field of occupational safety and health to act.

Further attention to implementation and enforcement of OSH legislation in high-risk sectors would help to address serious health and safety risks for migrant workers.

For domestic workers, many of whom are migrants, the implementation of the ILO's Convention could lead to improvements in their working conditions, including in terms of OSH. The issue of extending the scope of Directive 89/391/EEC to include domestic workers should be carefully considered; simplified obligations for employers of domestic workers could be set out.

EU initiatives could also promote the translation of health and safety documents into major languages spoken by migrant workers, as well as the use of pictograms (already a provision for the labelling of dangerous chemicals under the CLP Directive).

Occupational health and safety considerations targeting migrant workers could be usefully mainstreamed into other EU policies, both directly related to immigration (such as the European Agenda for the Integration of Third-Country Nationals\textsuperscript{304}) and indirectly connected to it. One example could be the Common Agricultural Policy, where a link between EU subsidies and obligations to implement EU health and safety legislation, similar to current provisions related to environmental requirements, could be considered.

It would also be valuable to address health and safety issues in initiatives on undocumented third-country nationals; for example, the Employer Sanctions Directive gives illegally employed workers the right to remuneration: similar rights could also be granted in the areas of health and safety, such as compensation for damages to the worker’s health caused by breaches of OSH legislation by the employer.

\textsuperscript{304} European Commission, Communication to the European Parliament and the Council, the European Economic and Social Committee and the Committee of the Regions, European Agenda for the Integration of Third-Country Nationals, COM(2011) 455 final, 20 July 2011, Brussels.
7 TEMPORARY WORKERS

KEY FINDINGS

- Temporary workers on average face more difficult working conditions (e.g. shift work and hazardous tasks) than permanent workers. They are also affected by poorer ergonomic conditions than permanent workers and are at higher risk of developing MSDs. Some national and regional studies have found that temporary workers face higher levels of occupational injuries.

- These workers have less access to training and are less likely to be unionized; this can lead to a lower level of social and OSH protection than permanent workers receive.

- Temporary workers can experience high level of stress and frustration, which can negatively affect their lifestyle.

- Possible options for EU action include greater attention to this category in data gathering, supporting stronger inspection activities on the working conditions of temporary workers and promoting actions for implementing a longer term approach in health and safety prevention for temporary workers.

7.1 Overview and socio-economic trends

The number of temporary contracts has grown steadily in the EU. In 1999, 11.8% of workers were classified as temporary: this figure reached 14.6% in 2007 (although it has slightly decreased to 14% by 2010). From 2008 to 2010, the EU saw a further increase in temporary workers, whose numbers rose significantly in some Member States, including Italy and Ireland (see Figure 21 below).

Temporary workers do not have specific characteristics in themselves, as the factors which distinguish them are of a social and economic nature, not biological or cultural as with the previous categories of vulnerable groups analysed in the study. They cover a broad range of situations, all of which are classified as “atypical” in comparison to the standard form of employment that is the permanent full-time contract.

Temporary work is defined in the EU legislation as an employment relationship governed by a fixed-duration contract of employment concluded directly between the employer and the worker, where the end of the contract is established by objective conditions such as: reaching a specific date, completing a specific task or the occurrence of a specific event. Workers employed through temporary work agencies belong to this category. When autonomy from their contractual counterpart is particularly limited, self-employed workers performing a specific time-limited task or subcontractors can also be included within this group; trainees can also be covered by this category. The majority of temporary workers are however “standard” employees with a fixed-term contract.

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305 Eurostat, Health and Safety at work in Europe – A statistical portrait, as above, p20
There is a strong crossover between this and other vulnerable groups. Many students, migrant workers, women returning to work after childcare breaks and people with disabilities have temporary contracts, which provide them easier access to the labour market.

Young people are particularly overrepresented amongst temporary workers because a large proportion of them are students looking for a part-time job around their studies. According to the European Trade Union Institute (ETUI), the proportion of workers under 25 among temporary workers in the EU ranges between 30 and 50%, peaking at 51% in Spain and 52% in the Netherlands.\(^{307}\)

Another reason why young workers are more likely to hold temporary positions is that many employers today complain that first-time job seekers lack “work experience”, which pushes young people to look for internships, apprenticeships and other short-term employment opportunities before obtaining full-time work contracts. An illustration of this is that, in most EU countries, the proportion of young workers with temporary contracts has increased between 2008 and 2010 (except for Cyprus, Denmark, Portugal, Romania, Slovenia and Spain).\(^{308}\)

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Many temporary workers do not choose this status, but are forced into it because of the lack of permanent contracts in their sectors or because of their low qualifications and experience. However, some workers, especially women, choose this type of job, for instance, to have more time for childcare and house care. Temporary work can also represent a certain form of freedom for the workers in particular skilled professions, such as in the arts, culture and entertainment industries or in the professional sector, who report a generally high level of satisfaction. This shows that the category “temporary worker” is broad and a thorough and more precise analysis of the OSH risks for these workers requires first a determination of other relevant circumstances (voluntary vs. involuntary, low-skilled jobs vs. high-skill short-term assignments).

**Socio-economic trends**

Changing global employment trends have increased the number of temporary (also called non-permanent) workers. These contracts offer more flexibility to companies in a world where competition is won through flexibility and the ability to change.

Temporary contracts are part of a greater category of contractual arrangements, which can be qualified as “atypical”. These include also part-time contracts, pseudo self-employment, subcontractors and on-call contracts. Contracts can be permanent and still challenging in terms of workers' well-being due to other 'atypical' features, as can be the case for part-time and hourly contracts. These “new forms of contractual relationships” have consequences for the health and safety of workers.

As noted by the European Commission in its Green Paper of November 2006 on modernising labour law, these atypical forms of employment then represented 25% of the workforce. Labour market policies based on the concept of flexicurity (flexibility in employment relationships together with lifelong learning, active job market policies and social policies that provide adequate income support during transitions) may lead to more workers in temporary positions.

Another issue to mention regarding temporary employment is the situation of posted workers, who are sent to temporarily work in another Member State than the one where they are normally employed. As little data are available on posted workers, it is difficult to assess what their working conditions are; however, some of the issues that apply to atypical or temporary workers are also relevant for posted workers.

Nowadays, it is very common to find workers under very different forms of contractual relationships in one company. Employers can use temporary workers for certain specific situations such as the replacement of a permanent employee on sick or maternity leave or the need for extra labour on the production line to satisfy a temporary (e.g. seasonal) growth in demand. In addition, organisations tend to be increasingly more project orientated (i.e. they work more on a project-based approach which means that the work is being carried out on a (temporary) project basis and the worker needed only for a short period of time). The duration of a temporary job can vary from a few weeks to a few months, sometimes a year or more.

By nature, the situation of temporary workers is unbalanced in comparison to that of permanent employees. Temporary workers often do the same job and carry out the same tasks as permanent employees, but they do not enjoy the same level of training or same work advantages (e.g. bonuses, promotion, etc.). With the development of atypical working arrangements, the contracts being drawn up are not as formal as permanent contracts.

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309 Eurofound, *Flexible forms of work: ‘very atypical’ contractual arrangements*, p21
They have a short-term basis and can vary from one group of workers to another, increasing the lack of transparency for workers.\textsuperscript{311}

Although temporary jobs can be found throughout the economy, they are particularly common in the construction and agriculture sectors. Only 58\% of skilled agricultural workers and 65\% of unskilled workers hold indefinite-term contracts in comparison to 78\% of the total EU27 workforce.\textsuperscript{312} In Greece, only 8\% of the workers in the construction sector have contracts of indefinite duration.\textsuperscript{313}

\section*{7.2 Risk factors}

\subsection*{Summary table}

<table>
<thead>
<tr>
<th>Endogenous Risk Factors</th>
<th>Exogenous Risk Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job insecurity</td>
<td>Sectoral and occupational segregation</td>
</tr>
<tr>
<td></td>
<td>Lack of OSH trainings</td>
</tr>
</tbody>
</table>

The distinction between endogenous and exogenous risk factors is not so clear or useful for temporary workers. The risks they face are related to their contracts and their status.

\subsection*{Overview of risks}

There are specific risk factors linked to each of the different types of temporary workers. However, the following overview will mainly focus on the risk factors common to all of them.

As illustrated above, non-permanent workers can have less control over their jobs, as well as their working time, than permanent workers. They also have poorer career prospects, as it is usually much harder to develop in a company on a short-term basis.

Studies have shown that there exists a negative relationship between workers who have a temporary or fixed-term contract and the conditions in which they work.\textsuperscript{314} Consequently, a "transfer of risk" is often operated between the permanent employees and temporary workers. For example, several studies have shown that subcontractors and self-employed workers face worse ergonomic and, in general, working conditions than permanent employees. This is reflected in higher incidence of musculoskeletal diseases.\textsuperscript{315} EU OSHA reports that temporary workers are likely to be found to be more exposed to risks connected with awkward postures, intense noise, repetitive movements and short repetitive tasks.\textsuperscript{316}

Workers with part-time or hourly contracts, whether temporary or permanent, can also be subject to difficult working conditions which reflect on their health. In particular, workers under precarious part-time or hourly contracts, such as is often found in the restaurant and hotel sector, are vulnerable to schedule changes and difficulties in getting time-off, which can lead to fatigue and sleep disorders.

\textsuperscript{311} EU OSHA, \textit{New forms of contractual relationships}, as above, p16
\textsuperscript{312} Eurofound, \textit{Fourth European Working Conditions Survey}, as above, p8
\textsuperscript{314} EU OSHA, \textit{New forms of contractual relationships}, as above, p 28
\textsuperscript{315} Ibid., p29
\textsuperscript{316} EU OSHA, \textit{OSH in figures: Work-related musculoskeletal disorders in the EU — Facts and figures}, as above, p51
Temporary workers can have less access to training as employers of such workers, especially those on very short-term contracts, may not be willing to invest to train non-permanent workers. In this regard, the differences between temporary workers and permanent employees are major. Despite legal obligations, one aspect of work which can be particularly affected by the short duration of a particular job is health and safety training. The initiation period at work might be greatly reduced, if not scrapped altogether, for workers with short-term contracts. Eurofound national reports on training have found that in most Member States, workers employed via temporary agencies receive far less training in occupational health and safety than other workers.

Because of a lack of experience, either in the job or in the company, and because of lack of training and mentoring, temporary workers are more exposed to work-related injuries. Researchers have also shown that temporary agency workers and short-term contract workers are more at risk of accidents in industrial sectors (no difference in the service sector) than permanent workers.

As mentioned previously, temporary workers and other workers under atypical contractual arrangements tend to be over-represented in the “three-D” jobs – dirty, dangerous, demanding. These are found inter alia in the agriculture, construction, domestic and cleaning services and health sectors.

A related factor for some groups of temporary workers is that they “fall outside the jurisdiction of committees that monitor working conditions or labour unions”. Contracts are often negotiated individually. The lack of any collective bargaining can make temporary workers feel more insecure about their jobs and feel as if they lack control, not only over their contract as a whole, but also over the separate elements such as working times, pay and holidays. Due to this insecurity, they are more likely to accept harder and worse working conditions.

Although work-related stress affects more permanent workers, temporary workers suffer from job insecurity, since they know that they will have to find another job after the current contract is finished. It has been shown in various studies that job insecurity is associated with high morbidity rates. In addition, as reported in the EU-OSHA report “Workforce diversity: ensuring everyone is covered”, changing companies on a regular basis means that temporary workers do not have the time to become used to the OSH rules associated with a certain workplace before they have to change and adapt again.

Temporary workers are particularly vulnerable to economic downturns. The European Commission reports that, at the height of the 2008 economic crisis, job losses for temporary workers were almost four times higher than for those in permanent employment. This feeling of insecurity with regard to their professional future can create frustration and stress in temporary workers, not only at work, but also in their private lives. There is a strong relationship between job insecurity and psychosocial well-being and it has been demonstrated that workers who change job often are more likely to smoke and consume alcohol.

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317 EU OSHA, New forms of contractual relationships, as above, p34
318 Eurofound, Impact of training on people’s employability, Dublin, 2007, p44.
319 Eurofound, Impact of training on people’s employability, as above, p29
320 EU OSHA, New forms of contractual relationships, as above, p30
321 Ibid., p29
323 EU OSHA, Workforce diversity and risk assessment: ensuring everyone is covered, Working Environment Information, Belgium, 2009, p33
This fact is striking when looking at deaths from alcohol-related causes, which are twice as common among temporary workers as for permanent workers, and smoking-related cancers (three times higher).\textsuperscript{324} However, considerable care should be exercised in attributing these to their temporary pattern of employment, as they might reflect lifestyle factors which result in them being unwilling, or finding it difficult to maintain, permanent employment.

Another consideration is that, in some Member States (such as Slovenia or Germany), very atypical contracts (very short-term for instance) are less likely to be covered by health insurance, as employers are not obliged to pay contributions to social funds for these workers.\textsuperscript{325}

### 7.3 Health Outcomes

Quantitative data have shown that there is a strong relationship between temporary jobs and the number of accidents. Although EU-wide data has not been found, some national studies show that temporary workers are at greater risk of suffering from accidents or occupational diseases than permanent workers.

In Finland it is reported that temporary workers in industry face a 10-15\% higher rate in accidents than permanent workers.\textsuperscript{326} In Spain, the rate of accidents for temporary workers is more than twice that for permanent employees, as illustrated by Table 8.

#### Table 8 Rate of accidents by employment status, Spain, 2000-2005 (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Employee with permanent job</th>
<th>Employee with fixed term contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>42.9</td>
<td>131.5</td>
</tr>
<tr>
<td>2001</td>
<td>44.2</td>
<td>122.1</td>
</tr>
<tr>
<td>2002</td>
<td>43.3</td>
<td>113.5</td>
</tr>
<tr>
<td>2003</td>
<td>39.7</td>
<td>105.8</td>
</tr>
<tr>
<td>2004</td>
<td>40.7</td>
<td>92.8</td>
</tr>
<tr>
<td>2005</td>
<td>39.9</td>
<td>88.0</td>
</tr>
</tbody>
</table>


In Austria, temporary workers have a higher rate of recognized occupational diseases than permanent workers (see Table 9).

#### Table 9 Rates of occupational diseases by employment status, Austria, 1998-2002 (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate of recognized occupational diseases per 10,000 temporary workers</th>
<th>Rate of recognized occupational diseases per 10,000 workers in total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>3.37</td>
<td>4.43</td>
</tr>
<tr>
<td>1999</td>
<td>7.41</td>
<td>4.39</td>
</tr>
<tr>
<td>2000</td>
<td>4.65</td>
<td>4.24</td>
</tr>
<tr>
<td>2001</td>
<td>5.73</td>
<td>4.52</td>
</tr>
<tr>
<td>2002</td>
<td>5.77</td>
<td>4.76</td>
</tr>
</tbody>
</table>


\textsuperscript{325} Eurofound, Flexible forms of work: ‘very atypical’ contractual arrangements, p20
\textsuperscript{326} EU OSHA, New forms of contractual relationships, as above, p30
Regarding specifically non-accidental health problems, the data can be contradictory. Indeed, because they are only working for a short period of time, fixed-term workers are less exposed to risk factors such as those linked to the use or contact with hazardous substances or to awkward postures leading to the development of MSDs. In addition, health problems are more likely to develop after a certain age (and long exposure). However, the nature of temporary work itself means that health problems can develop after the end of the contract. In addition, different types of occupational exposure related to different jobs or tasks can have a cumulative effect. This makes it very difficult for the workers and for the national compensation authorities to know the cause of the occupational disease and, thus, to recognize it as such.

Nonetheless, a study in the Friuli-Venezia Giulia region of Italy found that temporary workers (of all nationalities) suffered more than twice the rate of injury of permanent workers.\textsuperscript{327}

As has been shown in the previous section, according to national studies temporary workers suffer from greater psychosocial risks. In the UK, the Department of Business Innovation and Skills has shown that workers in insecure jobs, as temporary workers, are more likely to suffer from psychosocial troubles such as depression.\textsuperscript{328} In Finland, 42% of employees on fixed-term contracts feel that this form of working is mentally stressful, 56% of these workers indicated that planning for the future was difficult.

7.4 EU legal and policy framework

The EU has addressed the health and safety of temporary workers through Directive 91/383/EEC,\textsuperscript{329} which aims at ensuring that temporary workers enjoy the same level of protection as other workers. The Directive specifies that there should not be any difference in treatment in terms of OSH prevention between fixed-term workers and permanent workers, in particular with regard to personal protective equipment. It also states that employers have an obligation to inform fixed-term workers on the educational qualifications necessary to perform their job, if any special medical surveillance is required and whether the job falls within the category of major risks as defined in national legislation. Employers must also provide training appropriate to the particular characteristics of the job.

In 2006, a study to analyse and assess the practical implementation of national legislation of safety and health at work relating to Council Directive 91/383/EEC was carried out by an independent contractor for DG Employment.\textsuperscript{330} In addition to checking the transposition of the Directive in the national legal systems, the study looks at the impact on temporary workers of the introduction of these new measures, the difficulties, benefits and issues that have come up during the practical application of the national provisions.

The report concludes that the situation of temporary workers in Member States’ policies has not yet received proper attention. The study also notes that the directive would need to address a wider scope in order to ensure equal rights for temporary workers. From a psychosocial point of view, the directive should look for instance at the links between the worker’s employment status and psychological stress, harassment, dissatisfaction, and anguish.

\textsuperscript{327} V. Patussi et al., “Confronto dell’incidenza degli infortuni tra lavoratori tipici, interinali e migranti del Friuli-Venezia Giulia”, Epidemiologia e prevenzione, 32 (1), 2008, pp. 35-38. The study adjusted for the different shares of employment of temporary workers in different sectors.

\textsuperscript{328} Eurofound, \textit{Flexible forms of work: ‘very atypical’ contractual arrangements}, as above, p21


The EU social partners, ETUC, BusinessEurope and CEEP, concluded on 18 March 1999 a framework agreement on fixed-term work, implemented by Council Directive 1999/70/EC, which focuses on non-discrimination with regard to contractual arrangements, maximum number of renewals of fixed-term contracts and information to employees on employment opportunities.

In its Resolution of 15 January 2008 on the 2007-2012 OSH Strategy, the European Parliament expressed its concern at the "excessively high rate of accidents among temporary, short-term and low-qualified workers". It mentioned that despite the regulatory framework set by Directive 91/383/EEC, practical mechanisms allowing for the implementation of equal treatment between fixed-term and permanent workers were lacking.

More recent legislation addresses a specific category of temporary workers, agency workers. Directive 2008/104/EC defines a temporary agency worker as "a person with a contract of employment or an employment relationship with a temporary-work agency with a view to being posted to a user undertaking to work temporarily under its supervision". In its Article 5, the Directive highlights the principle of equal treatment, meaning that employment conditions of workers employed through temporary agencies must be at least the same as the employment conditions of workers employed directly through the company for the same job.

7.5 Initiatives in the Member States

Many of the initiatives identified overlap with those for other categories, including migrant workers and younger workers.

A review of Eurofound national reports on atypical employment shows that some Member States have implemented training programmes for temporary workers, sometimes addressing specific age groups, sectors or gender. In Spain, a programme has been set up targeting young workers in construction, whereas in Italy, France and the UK programmes for atypical workers focus mainly on women. Several Member States have set up specific OSH trainings for temporary agency workers.

Among private initiatives, safety passports (seen in Belgium), safety pass alliances (in the UK) or professional cards (in Spain) are an innovative approach. Although the details differ from programme to programme, their objective is similar. These schemes allow the worker to record the trainings they have followed and prove their credentials to the new company they are starting with. It also allows the company to see where the main gaps in the worker's knowledge are, if any, and provide for appropriate trainings.

7.6 Opportunities for EU action

The review has identified a range of occupational safety and health issues to be addressed for temporary workers. Key problems are related to ensuring adequate training and also to proper health surveillance, in particular for workers who hold a series of temporary positions. Other issues are related to enforcement of existing legislation in sectors that hire a large share of temporary workers, including those with seasonal work, such as agriculture and tourism.

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331 Formerly UNICE, Union of Industrial and Employers’ Confederations of Europe
Further data on the conditions and health of temporary workers would be valuable in terms of validating the initial results of EU and national surveys, which indicate that these workers face worse conditions and higher OSH risks than permanent workers.

At the EU level, further attention could be paid to long-term health surveillance of temporary workers: for example, this could be a topic to be included in reports on the implementation of Directive 91/383/EEC. Research and pilot initiatives should be supported to identify appropriate methods to ensure continuity in health surveillance of workers who hold a series of temporary contracts.

Labour inspections have a key role in guaranteeing the correct implementation of Directive 91/383/EEC. Specific guidance could be provided, as well as opportunities for exchanging experiences and good practices between national authorities on this specific topic, which would be especially useful in the new EU Member States. Focus on economic sectors that hire a large number of temporary workers, such as agriculture and construction, could lead to considerable improvements.

A further issue is the lack of visibility of the history of OSH training that a temporary worker has received and the gaps/needs for additional training in certain aspects. EU initiatives could promote systems such as the existing national “passports” containing information on the training carried out by the worker in his or her previous positions.
8 LOW-QUALIFIED WORKERS

KEY FINDINGS

- Low-qualified workers are found mainly in traditional sectors, including manufacturing, agriculture, construction, wholesale and retail trades.

- Very often these workers have high-risk or elementary occupations that expose them to a higher rate of injuries and health-related problems.

- Low-qualified workers have less autonomy, less responsibility and overall experience less job satisfaction than workers with higher qualifications. Most low-qualified workers have low-paid jobs and many have temporary contracts. All of these factors can create stress and anxiety.

- The EU supports the provision of vocational training for low qualified workers through the European Social Fund: the integration of occupational health and safety training within these programmes could be further promoted.

8.1 Overview and socio-economic trends

The European Foundation for the Improvement of Living and Working Conditions (Eurofound) defines low-qualified workers as those who have not completed three years of education or vocational training after finishing compulsory education. The group of low-qualified workers includes a great variety of people and situations. Moreover, many low-qualified workers also belong to other categories discussed in this study.

The number of low-qualified workers is decreasing in the EU (see Figure 22, below). This reflects in part the continuous increase in educational levels in recent decades.

Figure 22 Low-qualified workers in EU27 by gender, 2000, 2005 and 2010 (%)
Description and characteristics of the group

As shown in Figure 22 above, approximately 22% of all EU workers were low-qualified in 2006. This category includes female workers (21.4% of female workers are low-qualified in 2010), ageing workers (around 33% of older workers were low qualified in 2005) and young workers (around 25% of young workers were low-qualified in 2005).\textsuperscript{334}

Eurofound distinguishes between low-qualified workers and those in jobs that require low skills. Across the EU, the number of people in low-skilled jobs remains significantly higher than the number of workers with low qualifications: according to the LFS, 58% of male workers and 44% of female workers in the EU27 countries are in low-skilled occupations, compared to 27% of men and 24% of women belonging to the low-qualified group.\textsuperscript{335} This means that many EU workers do not get to use the skills they have acquired during their education and training, which can lead to job dissatisfaction and frustration.\textsuperscript{336}

Socio-economic trends

As illustrated by Figure 23, low-qualified workers are found in the manufacturing sector (20% in 2005), wholesale and retail trade (16%), agriculture (12%), and in the construction sector (11%). In terms of jobs, low-qualified workers are mostly found in elementary occupations in craft and related trades.

Figure 23 Low-qualified workers, by sector, 2005 (%)


\textsuperscript{334} EuroFound, Who needs up-skilling?: Low-skilled and low-qualified workers in the European Union, Dublin, 2008, p3
\textsuperscript{335} EuroFound, Who needs up-skilling?: Low-skilled and low-qualified workers in the European Union, as above, p8
\textsuperscript{336} T. Ward, F. Sanoussi, et al., Eurofound, Low qualified workers in Europe, November 2009, p27
Low-qualified workers can usually be considered to be low-paid workers, as a low level of qualification and a low level of income are often linked. This is particularly the case for low-qualified women, who are more likely than low-qualified men to find themselves in low-paid jobs.

In addition, low-qualified workers are also more likely to have fixed-term contracts than more qualified workers (73% of low-qualified workers have permanent contracts compared to about 80% of the overall workforce in the EU) and to experience job insecurity (15% of low-qualified workers believe that they might lose their job in the next 6 months compared to 13% of all workers). The combination of low qualifications and temporary contracts increases the likelihood of health and safety problems for these workers.

Finally, a higher proportion of low-qualified workers than of workers with higher qualifications are self-employed. In 2007, 17% of the low-qualified 25-49 years old were self-employed compared to only 13.5% of the 25-49 year olds with higher qualifications. This reflects in part, especially in the new Member States, a population of self-employed subsistence farmers for whom working conditions are particularly difficult. In general, self-employment poses health and safety risks to the worker, who, among other things, does not benefit from occupational health and safety trainings and guidance.

### 8.2 Risk factors

#### Summary Table

<table>
<thead>
<tr>
<th>Endogenous Risk Factors</th>
<th>- Work in high-risk sectors / high-risk occupations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exogenous Risk Factors</td>
<td>- Low pay / low responsibilities / low work autonomy</td>
</tr>
<tr>
<td></td>
<td>- Less access to training</td>
</tr>
<tr>
<td></td>
<td>- Exposure to psychosocial risks</td>
</tr>
</tbody>
</table>

The distinction between endogenous and exogenous risk factors is not so clear or useful for low-qualified workers, as the specific risks they face are mainly related to the types of occupations they hold.

#### Overview of Risk Factors

23% of low-qualified workers work in high-risk sectors for accidents (such as agriculture and construction). Furthermore, in these sectors they often hold occupations where they face the most dangerous tasks.

Even in other sectors, such as the wholesale and retail trades, low-qualified workers typically hold elementary positions and are exposed to the hazards linked to these. Low-qualified workers face harder physical working conditions than qualified workers who may face more cognitive demands in their jobs. Exposure to vibrations, loud noises, high and low temperatures, breathing in smoke and vapours, handling hazardous chemicals is higher for low-qualified workers. Within the category of low-qualified workers, plant and machine operators and assemblers as well as craft and related trade workers, are among those heavily exposed to these risks. As an illustration, 16% of low-qualified workers report being exposed to vibration ‘all the time’ compared to 9% of the other workers.

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337 Eurofound, *Who needs up-skilling?*, as above, p13
339 Ibid., p13
340 Eurofound, *Who needs up-skilling?*, as above, p17
With regard to physical movements, standing and walking is reported to be the most common straining physical movement by low-qualified workers (58% of low-qualified workers are exposed to this all of their working time). Repetitive movements and staying in awkward or tiring positions are also quite common among low-qualified workers. Figure 24, from Eurofound, illustrates very clearly that low-qualified workers are much more exposed to all types of demanding physical activities at work than other workers.

Studies have shown that low-qualified workers are more likely than highly qualified employees to have jobs with low control, low social support and low cognitive demands, but high physical demands, as we have just seen, and psychosocial pressure. The current move towards a knowledge-intensive EU society means that there is an existing trend to require higher skills and more demanding tasks for all kind of occupations, including low-skilled ones. This implies that low-qualified workers are likely to be subject to occupational stress, as defined in the EU social partners’ framework agreement on work-related stress:

“Stress is a state, which is accompanied by physical, psychological or social complaints or dysfunctions and which results from individuals feeling unable to bridge a gap with the requirements or expectations placed on them.”

In addition, low qualified workers tend to have fewer resources to deal with stress, such as social support from colleagues, superiors or external, and they tend to experience poor work-life balance. The 4th EWCS showed that only 35% of unskilled workers received external social support in comparison to 69% of senior managers.

341 Ibid., p18
342 Ibid., p32
344 Busch C, Staar H, et al., The Neglected Employees: Work–Life Balance and a Stress Management Intervention Program for Low-Qualified Workers, as above, p99-100
Low-qualified workers, especially low-qualified female workers, are more prone to harassment, which implies higher stress levels. A 2008 UK survey done for the Department for Business, Enterprise and Regulatory Reform shows that the low-paid and low-skilled workers interviewed, which included a significant proportion of migrant workers, suffered from a high level of abuse, including summary dismissal, non-payments, bullying, denial of maternity rights, etc.\footnote{R. Dunstan, D. Anderson, \textit{Vulnerable workers: preliminary findings from the Citizens Advice client research}, Department for Business, Enterprise and Regulatory Reform, London, 2008, p.6. Available at: \url{http://www.berr.gov.uk/files/file44089.pdf} (consulted June 2011)}

On a day-to-day basis low-qualified workers report having to carry out monotonous tasks for which they have little autonomy. A lower proportion of low-qualified workers report having the opportunity to increase their knowledge at their job compared with more qualified workers. Unsurprisingly, all of these factors mean that low-qualified workers on average, male or female, are less satisfied with their jobs than other workers.\footnote{Eurofound, \textit{Who needs up-skilling?}, as above, p21}

The issue of training is also a major factor explaining why low-qualified workers are more exposed to OSH risks than more qualified workers. The 2007 European LFS showed that only 4% of 25-49 year old male workers with low-qualifications and 6% of 25-49 year old female workers with low-qualifications had received training in the 4 weeks preceding the survey. This represents much less than half the share of more qualified workers.\footnote{T. Ward, \textit{et al.}, Eurofound, \textit{Low qualified workers in Europe}, as above, p28}

According to the 2005 EWCS, only 13\% of low-qualified workers had participated in training provided by the employer over the past 12 months (compared to 30\% of other workers).\footnote{Eurofound, \textit{Who needs up-skilling?}, as above, p26} By extension, low-qualified workers are less likely to receive training on occupational health and safety, which puts them at higher OSH risks. In addition, the nature of training itself differs for low-qualified workers. While 30\% of the other workers follow “off-the-job” training provided by their employer, only 13\% of low-qualified workers do and the main type of training available to them is “on-the-job” training, for which less investment is required (see Figure 25).

\textbf{Figure 25 Participation in training over last 12 months by occupation (\%)}

![Graph showing participation in training over last 12 months by occupation.]

\textbf{Source:} Eurofound, 5\textsuperscript{th} EWCS, 2010. Available at: \url{http://www.eurofound.europa.eu/surveys/ewcs/2010/training.htm}
The low participation rate of low-qualified workers in training is not just a reflection of difficulties to have access to it, but it may also reflect reluctance from these workers to follow additional education or vocational training\textsuperscript{349}, which, in turn, may be a consequence of poor offer of training adapted to the needs and background of low-qualified workers.

In general, the high proportion of low-qualified workers who do not participate in any form of training means that these workers are more vulnerable to occupational health and safety risks that could be prevented through it.

It has also been shown that employers are usually less interested in offering health promotion activities to low-qualified workers, possibly a reflection of the fact that the costs for this tend to be higher than the cost of replacing a low-qualified worker. In any case, financial costs are reported by employers as being the most important barrier to providing health promotion activities for this category.\textsuperscript{350}

More than one quarter of low-qualified workers have temporary employment, and thus are also affected by the risk factors described in the previous chapter, including job insecurity and limited access to the benefits of collective bargaining.

### 8.3 Health Outcomes

Studies have shown that the combination of low job control, high physical and psychosocial demands, as well as fewer training opportunities and fewer possibilities for development on the job are associated to increased health risks, in particular increased risk of long-term illness.\textsuperscript{351}

As reported by the Labour Force Survey 2007 ad hoc module and shown in Figure 26, there is a much higher rate of accidents among elementary occupations. Low-skilled workers are thus comparatively more exposed to accident risks.

**Figure 26 Accidents at work in the past 12 months by type of occupations, 2007 (%)**

![Figure 26 Accidents at work in the past 12 months by type of occupations, 2007 (%)]


The LFS ad hoc module 2007 also shows that highly educated persons have fewer work-related health problems (7.3\%) in comparison to intermediate (8.9\%) and low (8.9\%) educated persons (Figure 27).

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\textsuperscript{349} T. Ward, et al., Eurofound, \textit{Low qualified workers in Europe}, as above, p30

\textsuperscript{350} Busch C, Staar H, et al., \textit{The Neglected Employees: Work–Life Balance and a Stress Management Intervention Program for Low-Qualified Workers}, as above, p100

\textsuperscript{351} Busch C, Staar H, et al., \textit{The Neglected Employees: Work–Life Balance and a Stress Management Intervention Program for Low-Qualified Workers}, as above, p100
People with low or intermediate education more often identify bone, muscle or joint problems as the most serious work-related health problem. In contrast, high educated persons have more often suffered from stress, depression or anxiety, headache or eyestrain. Nonetheless, a UK survey showed that abuse suffered by low-skilled workers often led to anxiety, stress, depression and other related health problems.\(^{352}\)

**Figure 27 Most serious work-related health problems in the past 12 months by level of education, EU27 (%)**

![Figure 27](image)

*sample size below publication limit for skin problems (high education) and hearing problems (high and low education)*  

### 8.4 EU legal and policy framework

EU policy has emphasised the importance of improving worker qualifications. The Council Resolution of 15 November 2007 on the new skills for new jobs prioritizes raising the skill level of low-qualified workers through education and training.\(^{353}\) This was an important element of the Lisbon Strategy and has been highlighted in EU2020 as well. The flagship initiative *Agenda for new skills and jobs* calls for targeted approaches for several categories of workers, including those with low skills.

The Council’s 2010 *Guidelines for the employment policies of the Member States* call for the development of a skilled workforce and the promotion of lifelong learning (Guideline 8), including a focus on workers with low or obsolete skills.\(^{354}\)

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354 COUNCIL DECISION of 21 October 2010 on guidelines for the employment policies of the Member States (2010/707/EU)
8.5 Initiatives in the Member States

Member States have taken a range of actions to improve the situation of low-qualified workers and facilitate their access to the labour market. In many EU countries, training opportunities for low-qualified workers focus on raising their education levels or officially certifying the skills and competences acquired in their jobs through commonly accepted validation schemes, thus allowing them to access higher skilled jobs.

By and large, however, these activities do not include a specific occupational health and safety component. Nonetheless, a few examples of training programmes that address these issues have been identified: in the UK and Latvia, adult learning opportunities have been set up, while in Germany, a training programme targets young low-qualified workers. Another German initiative, financed by the German Federal Ministry of Education and Research, is the ReSuM project (Stress and Resource Management for Low-Qualified Workers: The Development of a Multiplier Concept) which is aimed at reducing occupational stress and improving work-life balance amongst low-qualified workers. It consists mainly in two intervention programmes, one for the working team focusing on physical exercises, social support, work-life balance, etc., and another programme for supervisors, focusing on strengthening supervisory care for subordinates’ health.

8.6 Opportunities for EU action

Raising workers’ qualifications is a key policy objective for the EU. The EU supports training programmes set up by Member States and regions through the European Social Fund, which in some cases already include modules on occupational health and safety. Opportunities to integrate occupational health and safety issues into programmes targeted to low-qualified workers could be expanded and OSH training could become a permanent element within this wider effort. Ad hoc programmes aimed at raising awareness, both among low qualified employees and their employers, and training these workers to recognize risk factors and prevent occupational incidents and accidents could also be promoted.

Psychosocial risks should not be neglected in health and safety programmes targeted at low-qualified workers, as they can face high levels of stress and other similar risks.

Low-qualified workers are distributed throughout the categories that we have analysed in previous sections of this report, in particular migrants, young and temporary workers. Therefore, some of the initiatives suggested for other target groups will also bring results to low-qualified workers. For example, passport systems (as described in the section on temporary workers) could benefit low-qualified workers who hold a series of temporary contracts.

In addition, efforts to improve the enforcement of OSH legislation with respect to low qualified workers, in particular in specific economic sectors such as agriculture and construction, will also be valuable: as many available sources show, workers in this category are likely to receive less training and attention in the field of occupational health and safety than the others.

355 T. Ward, et al., Eurofound, Low qualified workers in Europe, as above, p31
356 Ibid., p38
357 Kooperation für nachhaltige Präventionsforschung, Stress and resource management for low-qualified workers, Abstract. Available at: http://www.knp-forschung.de/?uid=50663e7bbb9f416338f42027cde54b4&id=detailen&sid=8&sub=5&idx=27
(consulted June 2011)
9 CONCLUSIONS

This study has reviewed the occupational health and safety risks for seven most vulnerable groups of workers. It has described the exposure of these groups to occupational health and safety risks, analysed health outcomes due to these risks where data were available, and reviewed current EU and Member States’ actions to address these problems.

The need for further action

Occupational health and safety remains an important challenge across the European Union. While EU-wide data have shown progress in some areas, notably a reduction in recent years in workplace accidents among men, the rate of other work-related health problems has increased among both men and women. The rate of musculoskeletal diseases in particular has increased sharply. Overall, workplace accidents and diseases remain a burden on the EU economy. They resulted in an estimated loss of 367 million working days in 2007.

Attention to the most vulnerable groups of workers has been a long-standing element of EU legislation and policy for occupational health and safety. The 1989 Framework Directive calls for attention to “particularly sensitive groups” of workers, and subsequent legislation has addressed the specific situations of several groups (women who are pregnant or have recently given birth as well as temporary workers and young workers). The EU 2007-2012 Community Strategy on Health and Safety at Work refers to vulnerable groups in several of its objectives. Notably, the Strategy:

- calls for the proper implementation of EU legislation, noting shortcomings regarding certain categories including young workers and temporary workers;
- calls on Member States to address social and demographic changes, such as the growing role of women, ageing workers and migrant workers in the workforce;
- encourages a culture of prevention, including health and safety training in schools and at university level, thus addressing young people entering the workforce;
- draws attention to new and emerging risks, including psychosocial problems and dangerous substances, and it gives attention to the prevention of mental health problems and the better integration of workers with mental disabilities;
- calls for better assessment of progress related to vulnerable groups of workers.

The attention to vulnerable workers is particularly important in light of major social and economic changes underway in Europe. Demographic changes include an ageing workforce and a growing number of migrant workers in Europe. Companies have responded to global economic changes in part through greater workforce flexibility, such as the growing use of temporary workers. The number of women in the workforce has increased and the growing role of the service sector in Europe’s economy, in comparison to industry and agriculture, has led to a shift in the types of worker health and safety problems. In health care, education and also new service activities such as call centres, women in particular face workplace specific psychosocial risks.

Recent European policy initiatives provide a further impetus. The EU2020 Strategy calls for an increase in workforce participation over this decade, in particular concerning women and ageing workers.

This study shows that these seven categories of vulnerable workers face ongoing occupational safety and health risks and related health problems, some of which are presented in Table 10 below. Thus, the specific issues which affect them need to be addressed in order to improve worker health and safety as a whole in Europe.
Table 10 Examples of key occupational health and safety issues for vulnerable groups of workers

**Women**
- In 2005, 6% of female workers under 30 – and 2% of all workers – reported being exposed to unwanted sexual attention
- Women are strongly affected by musculoskeletal diseases. In 2005, these accounted for 85% of all recognized occupational diseases among women, in comparison to 59% for all workers.

**Ageing workers**
- Older workers report more work-related health problems than younger workers, with backache and muscular pain reported by more than 70% of those aged 55 and more and general fatigue and stress reported by more than 50% of those aged 55 and more.

**Workers with disabilities**
- In Sweden, 5.1% of workers with disabilities and reduced ability to work reported not being able to participate in training since it was not adapted to their disabilities and 8.4% reported having been bullied, harassed or offended.

**Young workers**
- Overall, young workers have a 40% higher rate of non-fatal injuries than older workers
- Studies have shown that among workers aged 15 to 24, more than 50% of all injury claims had occurred in the first five months on the job

**Migrant workers**
- National and regional studies indicate that migrant workers suffer higher accident and injury rates. For example, a regional study in Italy found that the injury rate for permanent workers born outside of the country was 60% higher than that for permanent workers born in the country and working in the same sectors.

**Temporary workers**
- In Finland, 42% of employees on fixed-term contracts felt that this form of working is mentally stressful, and 56% of these workers indicated that planning for the future was difficult.
- A regional study in Italy found that temporary workers (both migrants and nationals) suffered more than twice the rate of injury of permanent workers in the same sectors.

**Low-qualified workers**
- Exposure to vibrations, loud noises, high and low temperatures, breathing in smoke and vapours, handling hazardous chemicals is higher for low-qualified workers.
- According to 2005 data, only 13% of low-qualified workers had participated in training provided by the employer over the past 12 months.
Overview of options for further EU action

The previous chapters have identified a range of options for EU action. This section provides an overview of the key areas for attention, highlighting common issues for EU action across the groups of most vulnerable workers.

Legislation and strategic options

The EU has a broad set of legislation for both health and safety at work. One option was identified for further attention: removing the exclusion of domestic workers in EU legislation. In addition, the analysis has highlighted the importance of musculoskeletal disorders for many vulnerable groups, such as women. The European Commission has announced a proposal for a specific directive to address this issue.

In addition to legislation, the EU uses many policy instruments to implement its objectives. The Open Method of Coordination (OMC) has been used in particular in the field of social policy in order to encourage Member States to cooperate on issues that fall outside of the EU’s legislative competences, or where legislation is not deemed to be the most suitable tool, as well as to monitor the implementation of existing legislation. This instrument, through the multiannual OSH strategies, is also an important mechanism to address some of the issues related to workers' OSH which do not find appropriate legislative solutions. The need to improve the situation of vulnerable groups should be further highlighted in the next OSH strategy as of 2013, including through new targets specifically referring to some of them.

Implementation and enforcement

The 2007-2012 Strategy highlights the importance of proper implementation and enforcement of EU health and safety legislation, calling attention for example to the needs of young workers and temporary workers.

The European Parliament, in its resolution on the Community Strategy 358, called on national labour inspectorates to pay greater attention to vulnerable workers. In the course of their inspections, labour inspectors could further focus on the working conditions of certain categories. This could be done through additional criteria added to the protocols or guidelines used. This horizontal approach would provide a general overview of the risks affecting these workers, irrespective of their sector of activity.

Besides actions implemented by national and local public authorities, the analysis has highlighted many initiatives taken by individual companies and by industrial sectors. Further activities could be encouraged: for example, it may be useful to call for additional actions supporting SMEs. Similarly, social partners can play an important role that should be emphasised.

Funding

EU Structural Funds – and in particular the European Social Fund – have played an important role in supporting actions for occupational safety and health. Our review has identified a number of programmes that provide funding support – for example, for the integration of workers with disabilities or ageing workers in SMEs.

There may be scope, in the next cycle of the EU budget, to further increase the role of the European Social Fund in addressing worker health and safety issues for vulnerable groups of workers.

In order to strengthen the impact of EU financing, an evaluation of occupational safety and health initiatives supported by EU funds in the current cycle should be performed to identify those actions which have successfully targeted vulnerable categories of workers. This could help to spread good practices, as well as to highlight areas where greater funding may be valuable.

Research and data gathering

The study has identified several important areas for further scientific and policy research, as well as a need for more robust data in relation to specific categories of workers and specific issues.

Areas for further research include, for example:

- For women, a need for greater understanding of the effect of working conditions on overall reproductive health, beyond a focus on the period of pregnancy; of combined exposure to health risks from the workplace and home work; of the causes of occupational accidents for working women; and an identification of best practices to address psychosocial hazards in the workplace.
- For young workers, further work on the prevention of development of occupational health problems by focusing on young workers' subjective perception of their health.
- For migrant workers, further data on their OSH risks compared to permanent workers in the same sectors and jobs.

Policy research can play an important role by identifying best practices in addressing the problems of vulnerable workers. For example, the organisation of work within companies has been identified as a key factor for improving the health and safety of older workers and retaining them in employment longer: here, a review of best practices on mechanisms to address specific needs could help to raise awareness among European governments, companies and social partners of the benefit of adopting new approaches to work organisation.

In addition, this study has identified a need for better EU-wide statistical information on the conditions of vulnerable groups of workers – this could be an important element for future surveys on working conditions and workplace health and safety.

Awareness-Raising

Our review of Member State initiatives has shown that awareness-raising activities are an important tool to address occupational health and safety issues. Many actions are directed towards workers, although some are more focussed on employers.

At EU level, information campaigns which address worker health and safety could specifically target vulnerable groups of workers. In 2006, for example, the European week for safety and health at work called 'Safe Start' focused on young people. It should be noted, however, that this experience was evaluated as being too restrictive by some stakeholders, who argued that EU campaigns should be as broad as possible.359

Other campaigns, for example those on MSDs or psychosocial risks, could nonetheless include an analysis of the groups of workers most vulnerable to those risks and target actions to address them.

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Occupational health and safety risks for the most vulnerable workers

Links to other policy areas

The analysis performed by this study has looked at the broader socio-economic context for the health and safety of the most vulnerable groups and has highlighted at several points the links between occupational health and safety policy and other policy areas.

The importance of these links has already been recognised at EU level. Notably, the Community Strategy 2007-2012 calls for stronger policy coherence and identifies four areas: public health, regional development and social cohesion, public procurement and employment and restructuring. The analysis of vulnerable groups of workers presented in this paper reinforces this call for policy coherence, and also highlights a range of additional policy areas where further efforts for coherence would be valuable.

For ageing workers, employment and retirement policies are extending their years at work. In this situation, it is even more important to put in place age management systems that address their increased health and safety risks.

The growing use of temporary (and other atypical) contracts is a consequence of both economic conditions and employment policies supporting greater flexibility. The study has highlighted the need to address the occupational health and safety risks to temporary workers, as these on average are higher than those of permanent workers. As a result, further actions to respond to the specific needs of these categories of workers should be considered by policy-makers when promoting the use of new forms of employment relationships.

The occupational health and safety issues concerning migrant workers are closely related to broader migration policies, including policies to integrate migrants, as well as those for contrasting the exploitation of undocumented migrants.

For young workers in particular, educational programmes have been used by many Member States to increase participants’ awareness of occupational health and safety hazards, and such efforts could be strengthened and used more widely.

Occupational health and safety policies also have strong links with environmental policies. For instance, the analysis has highlighted the vulnerability of certain categories of workers, in particular women, young workers and migrant workers, with regard to chemicals. Here, existing rules already play an important role, for example with the classification and labelling of chemicals using pictograms, as this can for example help migrant workers, who do not speak national languages, to recognise the hazards of specific chemicals they use. The effects of chemicals on human health, including of multiple exposure, is an important area for ongoing research and policy attention.
ANNEX I: INITIATIVES IN THE MEMBER STATES

Information in this annex comes from a variety of sources, including:

- Various websites of national health and safety authorities and other stakeholders.

Table 11 Initiatives in the Member States targeting female workers

<table>
<thead>
<tr>
<th></th>
<th>Awareness-raising</th>
<th>Training</th>
<th>OSH management</th>
<th>Guidance</th>
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</thead>
<tbody>
<tr>
<td><strong>Austria</strong></td>
<td>'Caring for carers: occupational health for staff in people's homes' → awareness raising brochure and leaflets on OSH risks for staff working in old people's homes (EU OSHA SMEs report)</td>
<td></td>
<td></td>
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<tr>
<td><strong>France</strong></td>
<td>Campaign on health and safety risks of domestic workers (see migrant workers)</td>
<td>National training programme for women in the workplace</td>
<td></td>
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<tr>
<td><strong>Germany</strong></td>
<td>'Reducing stress among female cleaners at a hospital' → implement OSH management of support services into general management; emphasis on psychological issues (esp. sexual harassment) rather than on physical ones; participation of the workers in the process (EU OSHA Diversity report)</td>
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<tr>
<td><strong>Luxembourg</strong></td>
<td>'Avoiding back injury and other problems in crèches' by Service de Santé au Travail Multisectoriel → production of a guide to good practices for avoiding musculoskeletal disorders in crèches</td>
<td></td>
<td></td>
<td>Good practice guide for the prevention of MSDs in crèches (<a href="http://www.snst.lu">www.snst.lu</a>)</td>
</tr>
</tbody>
</table>
### Occupational health and safety risks for the most vulnerable workers

<table>
<thead>
<tr>
<th>Country</th>
<th>Awareness-raising</th>
<th>Training</th>
<th>OSH management</th>
<th>Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Netherlands</strong></td>
<td></td>
<td>‘Arbocoaching’ → provides training for women who want to return to work on <em>inter alia</em> emotional distress, stress, burnout, time management and work fulfilment</td>
<td>Covenant for hairdressing sector agreed by social partners placing obligations on employers to provide safer workplaces (<a href="#">See young workers section</a>)</td>
<td>‘Healthy working for young, high educated women’ by Stichting WAHO → reduce the percentage of young women who have a work disability pension (<a href="http://www.waho.nl">www.waho.nl</a>) Guidance on preventing injuries</td>
</tr>
<tr>
<td><strong>Portugal</strong></td>
<td>National OSH Institute campaigned for more OSH prevention in textile and ceramic sectors, dominated by women (<a href="#">EU OSHA Women report</a>)</td>
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<tr>
<td><strong>Spain</strong></td>
<td>‘Occupational risks for women in metal industries’ → emphasis on &quot;new labour risks&quot; such as violence, bullying, anxiety in metalworking industries targeting female workers (<a href="#">EU OSHA SMEs report</a>)</td>
<td>‘Occupational risks for women in metal industries’ → emphasis on &quot;new labour risks&quot; such as violence, bullying, anxiety in metalworking industries targeting female workers (<a href="#">SMEs report</a>)</td>
<td>Guidance on preventing injuries</td>
<td></td>
</tr>
<tr>
<td><strong>Sweden</strong></td>
<td></td>
<td></td>
<td></td>
<td>‘Safety and Health for hairdressers across the EU’ → production of manual on how to handle and use chemicals in salon (translation in 11 languages) (<a href="#">SMEs report - transnational project</a>)</td>
</tr>
<tr>
<td><strong>UK</strong></td>
<td>‘Shattered Lives’ by Health and Safety Executive → campaign targets at industry sectors - Health and Education can be seen as targeting mainly female workers</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>EU-wide / Trans-national</strong></td>
<td><strong>Italy, Spain, Denmark, Belgium:</strong> ‘Safety and Health for women caring for the elderly and dependent’ → awareness raising and improving risk assessment targeting at risks faced by female workers (stress, MSDs, etc.) (<a href="#">EU OSHA SMEs report</a>)</td>
<td><strong>Italy, France, UK:</strong> ‘Health and Safety training for workers in atypical employment’ (<a href="#">see temporary workers</a>) → emphasis on female workers</td>
<td><strong>Sweden, Denmark:</strong> ‘Safety and Health for hairdressers across the EU’ (<a href="#">see young workers</a>)</td>
<td><strong>Spain, France, Italy:</strong> ‘Good practices in chemical risk assessment’ → providing practical tool to assess and prevent chemical risk targeted at women and reproductive health (<a href="#">EU OSHA SMEs report</a>)</td>
</tr>
</tbody>
</table>
### Table 12 Initiatives in the Member States targeting ageing workers

<table>
<thead>
<tr>
<th>Member State</th>
<th>Awareness-raising</th>
<th>Training</th>
<th>OSH management</th>
<th>Guidance /Tools</th>
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</thead>
<tbody>
<tr>
<td>Austria</td>
<td></td>
<td></td>
<td>‘Productive ageing: shift plan reform at TenCate Geosynthetics Austria GmbH’ → work organizational changes (working hours, shift) adapted to ageing workers to retain them at work (EU OSHA Diversity report)</td>
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</tr>
<tr>
<td>Belgium</td>
<td></td>
<td></td>
<td>‘Fonds de l'expérience professionnelle’ by the Belgian Federal Public Service Employment, Labour and Social Dialogue → funds projects targeting ageing workers’ health and safety to ensure their safe continuation at work</td>
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<tr>
<td>Czech Republic</td>
<td>‘Healthy ageing in the Czech Republic’ by GEMA (NGO focused on health of older people) → a comprehensive approach to the needs of older people.</td>
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<td>Third Age guidance-internet based planning tool for older people in the workplace</td>
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<tr>
<td></td>
<td>‘Employment and active lifestyle’ by the Czech Association of Occupational Psychologists and Managers (CAPPO) → CAPPO organizes regular seminars especially focused on ageing and older workers.</td>
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<tr>
<td>Denmark</td>
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<tr>
<td>Finland</td>
<td></td>
<td></td>
<td>‘Health promotion and workplace design’ by Ruoka-Saarioinen Oy, Finland → adopted range of measures to extend working lives of employees including personal health examinations, facilitation of physical exercise, implementation of ergonomic improvements.</td>
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<td></td>
<td>Ovako Koverhar and Ovako Dalsbruk, Finland → implemented measures to maintain health of older employees, including ergonomic improvements, redeployments in consultation with occupational health personnel, rehabilitation courses for employees after their 54th, 59th and 63rd birthdays. (Eurofound)</td>
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</tbody>
</table>

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### Occupational health and safety risks for the most vulnerable workers

<table>
<thead>
<tr>
<th>Country</th>
<th>Awareness-raising</th>
<th>Training</th>
<th>OSH management</th>
<th>Guidance /Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td></td>
<td></td>
<td>From 1/01/10 the French government imposed to SMEs to draft plans to allow ageing workers to keep working (incl. dispositions on H&amp;S) <a href="http://www.priorite-seniors.fr/accords/6-des-accords-de-branche-relatifs-a-l-emploi-des-seniors.html">http://www.priorite-seniors.fr/accords/6-des-accords-de-branche-relatifs-a-l-emploi-des-seniors.html</a></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td></td>
<td></td>
<td>‘Legesa – lifelong healthy working’ → promotion at company level of measures to minimize health risks for people of all age groups &amp; specific measures in support of older people for a healthy transition into the pension (<a href="http://www.lebenslang-gesund-arbeiten.de/index.php?lang=en">http://www.lebenslang-gesund-arbeiten.de/index.php?lang=en</a>)</td>
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<tr>
<td>Poland</td>
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<td></td>
<td>‘50 plus’ by Ministry of Economy, Labour and Social Affairs → programme, aimed at making it easier for people over 50 to return to work. Pilot projects include: reimbursement to employers of the costs incurred in employing older workers; grants for adjusting workplaces to the needs of older workers; active training; and innovative forms of work for employment offices.</td>
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</tr>
<tr>
<td>Romania</td>
<td>‘Improving Employability in Romania’ by Bucharest Chamber of Commerce and Industry (CCIR) → initiative, one component of which (regarding the ageing workforce) aimed to i) improve the chances of ageing members of the workforce to get access to continuous training, and ii) make access to skilled working positions easier for ageing members of the workforce.</td>
<td>‘National Program’ by National Agency for Workforce Employment (ANOFM) → two components of which target the ageing workforce: <em>Prolonging the active life.</em> An incentive scheme for employers, to hire workers who have a max. of three years left until retirement <em>Diminishing long term unemployment.</em> A bonus initiative for employers to employ unemployed persons over 45 years of age.</td>
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<td></td>
<td>Awareness-raising</td>
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<td>OSH management</td>
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<tr>
<td>Spain</td>
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<td>Action Plans for Employment in Spain (PNAE) → includes finding employment for those aged 44 and over, aiming to keep people employed even after 65 years (also has plans for women, young workers, disabled workers and migrant workers)</td>
</tr>
<tr>
<td>Sweden</td>
<td></td>
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<td></td>
<td>‘SSAB Tuanplat: Occupational health and well-being’ → focus on age-related OSH issues such as health check-ups, night shifts, stress because of shift work, etc. (ELDERS report)</td>
</tr>
<tr>
<td>United Kingdom</td>
<td></td>
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<td></td>
<td>Oil company, UK, offered workplace health assessments to resolve common problems among older workers such as back pain. Other measures include the availability of a doctor on site to review employees’ existing health problems and to intervene when serious health problems arise and annual medical examinations for employees aged 50 years and over. (Eurofound, Age management)</td>
</tr>
<tr>
<td>EU-wide / Trans-national</td>
<td>'Business Contribution to the European Year for Active Ageing' by Johnson &amp; Johnson, GDF SUEZ, Intel → promotes active ageing in employment; promotes active ageing in the community through volunteering and caring, etc.</td>
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</table>
### Table 13 Initiatives in the Member States targeting workers with disabilities

<table>
<thead>
<tr>
<th>Country</th>
<th>Awareness-raising</th>
<th>Training</th>
<th>OSH management</th>
<th>Guidance/Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>'Ergolab: the key to healthy and safe employment of people with disabilities' by Mariasteen vzw, a sheltered workshop → assists people with disabilities in helping them to find work which matches their abilities, assess potential risks at an early stage to prevent OSH difficulties, assess the workplace ergonomic features, etc. (EU OSHA Diversity report)</td>
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<tr>
<td>Denmark</td>
<td>Novo Nordisk → rehabilitation of workers with illness or injury through sustainable solutions incl. remodelling working environment (Eurofound report)</td>
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<tr>
<td>Finland</td>
<td>'Integration of disabled workers in the recycling industry' by Tervatulli Ltd recycling → company employed disabled workers, previously unemployed and temporary workers: tailored safety education (EU OSHA Diversity report)</td>
<td>'Maintenance of Work Ability' → comprehensive OSH management framework</td>
<td></td>
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<tr>
<td>Germany</td>
<td>'Tailored training strategies in OSH for young people with disabilities’ (also for young workers) → development of standardized educational tools adapted to trainees with disabilities to make them more aware of the OSH dangers and change their behaviour. (EU OSHA Diversity report)</td>
<td>'Promoting the integration of workers with disabilities at Ford - FILM project’ → reorganization of entire production units to reintegrate workers with disabilities (incl. older workers); reintegrate 503 workers with disabilities in the production units; development of IMBA tool (Integration of People with Disabilities into Working Environment) (EU OSHA Diversity report)</td>
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</tr>
<tr>
<td>Netherlands</td>
<td>MKB Benefits → provides insurance, reintegration and prevention services for companies; Helps companies (esp. SMEs) in the reintegration process of incapacitated employees, provides integrated approach to disabilities.</td>
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<tr>
<td>Norway</td>
<td>'Abeid med bistrand' initiative seeks to develop employment support for people with disabilities through the use of job coaches or support workers, who would assist people with vocational disabilities in finding and retaining employment</td>
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<tr>
<td></td>
<td>Awareness- training</td>
<td>Training</td>
<td>OSH management</td>
<td>Guidance/Tools</td>
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<tr>
<td>Spain</td>
<td>Promotion of employment of disabled workers</td>
<td></td>
<td></td>
<td>'Ergonomic adaptation of office and industrial workstations for disabled workers' → development of database of recommendations on workplace adaptation (2 projects: ADAPTOFI and ADAPREC) (EU OSHA Diversity report)</td>
</tr>
<tr>
<td>United Kingdom</td>
<td></td>
<td>'Access to work' Government-funded scheme → provides the disabled person and their employer advice and support with extra costs which may arise because of their needs. (<a href="http://www.direct.gov.uk/en/DisabledPeople/Employmentsupport/WorkSchemesAndProgrammes/DG_4000347">http://www.direct.gov.uk/en/DisabledPeople/Employmentsupport/WorkSchemesAndProgrammes/DG_4000347</a>)</td>
<td></td>
<td>Employers’ Forum on Disability → club of employers sharing best practices and developing guidance on employability of disabled people</td>
</tr>
<tr>
<td>EU-wide / Trans-national</td>
<td></td>
<td></td>
<td></td>
<td>Spain, UK: ‘Safety and health at work for people with disabilities’ → development and implementation of OSH management system in 4 SMEs employing disabled workers (EU OSHA SMEs report)</td>
</tr>
</tbody>
</table>
### Table 14 Initiatives in the Member States targeting young workers

<table>
<thead>
<tr>
<th>Country</th>
<th>Awareness-raising</th>
<th>Training</th>
<th>OSH management</th>
<th>Guidance/Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>'Kids Project’ by Austrian Labour Inspectorate → promotes health and safety culture among young workers and in schools (Young workers best practice report)</td>
<td>“Future Competence” at RHI A.G → providing young workers with a new skill called 'Future Competence': inter-disciplinary approach to safety including occupational medicine, occupational psychology, safety techniques, sports science, apprentice training, and management style (EU OSHA awards 2006)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>“Safe Start” by BeSWIC (Belgian Safe Work Information Centre) → website dedicated to young workers (students / interns / temporary workers) with examples, good practices and information on OSH prevention, rights and duties.</td>
<td>'Safety of young temporary workers in the steel industry’ by ARCELOR, Manpower and AXA (see temporary workers)</td>
<td></td>
<td>‘Safety Coach’ by Prevent → experienced workers are trained on specific issues affecting young workers and assist them (Young workers best practice report)</td>
</tr>
<tr>
<td>Denmark</td>
<td></td>
<td>’How easy it can be’ by Sector Work Environment Council for Retail → production of interactive educational software - ‘the training programme’ → to inform and instruct young people about working in retail (EU OSHA awards 2006)</td>
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</tr>
<tr>
<td>Finland</td>
<td>'National Youth Programme 2002-07’ by FIOH → promote health and functional capacity and ability among young people aged 15 to 29 (Young workers best practice report)</td>
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<tr>
<td>France</td>
<td></td>
<td>’Synergie’ by CNES&amp;ST → action-based training approach for students and apprentices in occupational risk management (Young workers best practice report)</td>
<td></td>
<td>National Research and Safety Institute (INRS), ‘Les jeunes travailleurs’, <em>Travail et sécurité</em>- guidelines and recommendations for young workers</td>
</tr>
<tr>
<td>Germany</td>
<td>'Jugend will sich-er-leben’ is an annual initiative which disseminates to schools training material such as videos, CDs and posters on different health and safety themes including noise, dangerous substances and infection. In 2006–07 the initiative focused on young people starting their professional life ('Neu im Job').</td>
<td>'Beating back problems at an early stage' by the Rhein-Mane trade association → preventive approach to back injuries in young workers; implementation of national OSH guidelines through vocational training (Young workers best practice report)</td>
<td></td>
<td>'Legesa – lifelong healthy working’ → promotion at company level of measures for adolescent and young people in preparation for a healthy work biography &amp; measures to promote a healthy mix of ages in the group work or workforce</td>
</tr>
<tr>
<td>Country</td>
<td>Awareness-raising</td>
<td>Training</td>
<td>OSH management</td>
<td>Guidance/Tools</td>
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<tr>
<td>Lithuania</td>
<td>’Training unskilled young workers in concreting’ by AB Klaipedos hidrotechnika → involving young unskilled workers in the production process to improve compliance with OSH legislation and reduce rate of injuries (Young workers best practice report)</td>
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</tr>
<tr>
<td>Netherlands</td>
<td>’Got a good idea’ by Stigas → training programme targeting agricultural students aged 16-20 years on physical strain (EU OSHA awards 2006)</td>
<td>Covenant for hairdressing sector agreed by social partners, with obligations on employers to provide safer workplaces (EU OSHA Young w. report)</td>
<td></td>
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<tr>
<td>Poland</td>
<td>’A safe start in the pharmaceutical sector’ by GSK → 1-year formalised and mentored induction process during which new employees are prepared for their future roles in the company (incl. on H&amp;S) (EU OSHA awards 2006)</td>
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<tr>
<td>Spain</td>
<td>’Trade Union OSH awareness campaign for young people’ by C.C.OO. Madrid → developed specific activities to achieve long-term reduction of work accidents/injuries (Young Workers report)</td>
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<tr>
<td>Sweden</td>
<td>’Facket i sommarland’ by LO → trade union summer assistance for young people on temporary jobs via a helpline: answers about H&amp;S problems, esp. psychosocial (EU OSHA awards 2006)</td>
<td>’Sound design in a typical rock club’ → implementation of noise reduction measures at the Henriksberg club (Young Workers report)</td>
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<tr>
<td>United Kingdom</td>
<td>’WiseUp2Work’ by IOSH → development of an interactive website with practical health and safety information and materials incl. a free Workplace Hazard Awareness Course for schools and colleges (EU OSHA awards 2006)</td>
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<tr>
<td>EU-wide / Trans-national</td>
<td>UK, France, Netherlands, Denmark, Germany: &quot;Safety rocks&quot; → project targeting live music industry workers (mostly young people) (EU OSHA SMEs report)</td>
<td>Denmark, Spain, Greece: &quot;Educating teenagers in the hazards of the workplace&quot; → targeting students and young people who work in SMEs, production of leaflet and website with educational model on OSH (EU OSHA SMEs report)</td>
<td>Sweden, Denmark: &quot;Safety and Health for hairdressers across the EU&quot; → manual on how to handle and use chemicals in salon (translation in 11 languages) (SMEs + Young Workers reports)</td>
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</tbody>
</table>
### Table 15 Initiatives in the Member States targeting migrant workers

<table>
<thead>
<tr>
<th></th>
<th>Awareness-raising</th>
<th>Training</th>
<th>OSH management</th>
<th>Guidance/Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>‘Mentoring für Migrantinnen’ → Austrian Chamber of Commerce and Industry set up a mentoring scheme where a national mentors a non-national at work and for other issues: occupational H&amp;S is among the topics addressed.</td>
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</tr>
<tr>
<td>Belgium</td>
<td>‘Belgian and Polish workers join forces for asbestos removal in the Brussels Finance Tower’ → integration of non-native speakers with a Belgian team of experts (interpretation, knowledge-transfer, etc.) (EU OSHA Diversity report)</td>
<td></td>
<td>VANHOUT diversity programme (also for low-qualified and young people) → welcome brochure with OSH prevention tips, &quot;builders' godfathers&quot;. Developed thanks to Flemish government Vilvoorde Pact. (EU OSHA Diversity report)</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>Three French agencies (CNAMTS, INRS &amp; ANSP) have launched a campaign to raise awareness on the health and safety risks for domestic workers (mostly migrant women) <a href="http://www.servicesalapersonne.gouv.fr/la-prevention-des-risques-professionnels-%2891051%29.cml">Link</a></td>
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<tr>
<td>Germany</td>
<td>Trade unions address migrant workers in all sectors, but especially in construction and agriculture</td>
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<tr>
<td>Ireland</td>
<td>‘Safety in manual handling for migrant and seasonal workers’ → production of a training pack including CD-ROM in 4 languages on OSH risks in the hotel and catering sector (EU OSHA SMEs report)</td>
<td></td>
<td>Safe System of Work Plan for the construction sector focuses also on migrant workers to reduce injuries and deaths → use of pictograms to explain OSH risks (EU OSHA Diversity report)</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>‘Safety training for immigrant workers’ → training material (DVDs) in five different languages targeting 3 sectors: construction, agriculture, forklift trucks (EU OSHA SMEs report) Construction Industry Professional Card (TPC Project) → the Fundación Laboral de la Construcción has set up a system of magnetic card containing information on the training the worker has already done and the specific skills he/she has acquired.</td>
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</tr>
<tr>
<td>United Kingdom</td>
<td>Awareness-raising</td>
<td>Training</td>
<td>OSH management</td>
<td>Guidance/Tools</td>
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<td></td>
<td>UK HSE has a specific website dedicated to migrant workers and their safety (available in 20 languages) <a href="http://www.hse.gov.uk/migrantworkers/index.htm">http://www.hse.gov.uk/migrantworkers/index.htm</a></td>
<td></td>
<td>UK passed in 2004 the Gangmasters Licensing Act to protect seasonal / casual workers by regulating the agencies that place them (sectors: agriculture, fisheries, industry packing)</td>
<td>&quot;Working safely in a multicultural food and drink industry&quot; → many non-nationals in the sector in the UK, HSE produced a guidance for managers on how to ensure safety with a multicultural workforce (EU OSHA Diversity report)</td>
</tr>
</tbody>
</table>
## Table 16 Initiatives in the Member States targeting temporary workers

<table>
<thead>
<tr>
<th>Country</th>
<th>Awareness-raising</th>
<th>Training</th>
<th>OSH management</th>
<th>Guidance/Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>‘Safety and Health for temporary workers at Sappi in Gratkorn’ → reduce accident rates among temporary workers through safety certificate from temporary work agencies, specific one-day training for temporary workers, three-day teambuilding workshops with permanent workers (EU OSHA Diversity report)</td>
<td></td>
<td></td>
<td>NAVB/CNAC (the Belgian Construction Safety and Health Committee) “Prévention et Interim” → provides safety resources for agencies to be downloaded (safety checklist for high risk industries) (Young Workers report)</td>
</tr>
<tr>
<td>Belgium</td>
<td>‘Safe Start’ project also targets temporary workers (see young workers)</td>
<td>‘Safety of young temporary workers in the steel industry’ by ARCELOR, Manpower and AXA → Development of a training tool and “Safety Passport” to ensure temporary worker candidates for Arcelor had the relevant knowledge on OSH issues (EU OSHA awards 2006)</td>
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<tr>
<td>Finland</td>
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<td>‘Reducing the rate of accidents to temporary labour’ → development of set of practical tools to help companies deal with H&amp;S problems with temporary workers (EU OSHA SMEs report)</td>
</tr>
<tr>
<td>France</td>
<td>‘Collaboration between agencies and employers to reduce accidents among temporary workers’ → regional health insurance fund from Languedoc-Roussillon (CRAM): agreement between firms employing temp workers and agencies to sponsor workers and train them to OSH risks. (EU OSHA Diversity report)</td>
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<tr>
<td>Germany</td>
<td></td>
<td></td>
<td>Bacardi’s safety measures did not include at first temporary and atypical workers. The implementation of a new certified OSH management system allowed for the introduction of measures to train external workers (on atypical contracts) on OSH prevention (EU OSHA Diversity report)</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td></td>
<td>Construction Industry Professional Card (TPC Project) (see young workers)</td>
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<td></td>
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</tbody>
</table>

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<table>
<thead>
<tr>
<th>Awareness-raising</th>
<th>Training</th>
<th>OSH management</th>
<th>Guidance/Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sweden</strong></td>
<td>'Facket i sommarland' by LO → trade union summer assistance for young people on temporary jobs via a helpline: answers about H&amp;S problems, esp. psychosocial ones (EU OSHA awards 2006)</td>
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</tr>
<tr>
<td><strong>United Kingdom</strong></td>
<td>The Safety Pass Alliance programme, created in 1999, has implemented a scheme for health and safety training passports, which allows workers to prove their basic health and safety 'credentials' by showing what training they have done when they arrive in a new company. Similar provisions exist within the offshore oil and gas sector.</td>
<td>UK passed in 2004 the Gangmasters Licensing Act to protect seasonal / casual workers by regulating the agencies that place them (sectors: agriculture, fisheries, industry packing)</td>
<td></td>
</tr>
<tr>
<td><strong>EU-wide / Trans-national</strong></td>
<td><strong>Italy, France, UK:</strong> &quot;Health and Safety training for workers in atypical employment&quot; → encourage preventive approach, improve knowledge and raise awareness on OSH risks of atypical workers (focus on women) + pilot project in 3 SMEs (SMEs report)</td>
<td><strong>Austria, Germany and Switzerland:</strong> dedicated to the integration of OSH into vocational training via a virtual platform that assists in developing and organizing seminars and training courses online. Provides schools and companies with information and ideas, advice on how to organize their own health and safety training, and in-house qualifications by means of the Internet.</td>
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</tbody>
</table>
### ANNEX II: LIST OF OFFICIALS AND EXPERTS INTERVIEWED FOR THE STUDY

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Interviewees</th>
<th>Date of interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE Platform Europe</td>
<td>Ms Rachel Buchanan</td>
<td>7 April 2011</td>
</tr>
<tr>
<td>BUSINESSEUROPE</td>
<td>Ms Rebekah Smith</td>
<td>11 April 2011</td>
</tr>
<tr>
<td>DG EMPL, European Commission</td>
<td>Mr Antonio Cammarota, Mr Francisco Alvarez &amp; Mr Jan-Willem Ebeling</td>
<td>13 April 2011</td>
</tr>
<tr>
<td>EU OSHA</td>
<td>Mr William Cockburn and Ms Sarah Copsey</td>
<td>27 April 2011</td>
</tr>
<tr>
<td>Eurofound</td>
<td>Mr Jean-Michel Miller</td>
<td>20 April 2011</td>
</tr>
<tr>
<td>ETUI</td>
<td>Mr Laurent Vogel</td>
<td>11 May 2011</td>
</tr>
<tr>
<td>DG EMPL, European Commission (Secretariat of the Senior Labour Inspectors Committee)</td>
<td>Mr Arsenio Fernandez Rodriguez</td>
<td>24 May 2011</td>
</tr>
</tbody>
</table>

Special acknowledgment to Mr Luigi Prando, Mr Joseph M. Azzopardi, Ms Boguslawa Urbaniak, Ms Karine Larsson, Ms Andrea Ferenczi from the AGE Employment Expert Group Member, for their help in collecting information in their Member States on ageing workers; and to Ms Elke Schneider from EU OSHA for providing references for the work on female workers.
REFERENCES

European Commission:


European Parliament:


European Parliament Resolution of 12 May 2011 on the proposed ILO convention supplemented by a recommendation on domestic workers


Council of the European Union:


Council of the European Union, *Resolution on the new skills for new jobs, 2007/C 290/01, 15 November 2007*

COUNCIL Decision of 21 October 2010 on guidelines for the employment policies of the Member States (2010/707/EU)

European Agency for Safety and Health at Work:


**European Foundation for the Improvement of Living and Working Conditions:**


**Others:**

CEN/CENELEC Guide 6, Guidelines for standards developers to address the needs of older persons and persons with disabilities, Edition 1, January 2002


Academic Articles:


Phillips L., Harrison T., Houck P., “Return to work and the person with heart failure”, Heart & Lung, VOL. 34, NO. 2, March/April 2005


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Documents