

Risks and Trends in the Safety and Health of Women at Work

European Risk Observatory

A summary of an Agency report

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1. Introduction

In 2009 and 2010, the Agency commissioned an update to its previous research on gender issues at work¹, which found that inequality both inside and outside the workplace can have an effect on the health and safety of women at work. This new report also provides a policy perspective and is meant to fulfil the task outlined by the European strategy on health and safety at work² for EU-OSHA's European Risk Observatory, "examining the specific challenges in terms of health and safety posed by the more extensive integration of women in the labour market".

Gender inequalities in the workplace and work-life balance issues have become increasingly important as employment rates of women have continued to grow in all Member States. But, although, in 2009, 58.6% of the European work force (EU-27) was female and women filled 59% of all newly created jobs, the extent to which women contribute economically still seems to be underestimated. A modern organisation of work, a knowledge economy, competitiveness and more and better jobs are central to the post-2010 Lisbon Strategy and the EU's 2020 Strategy. Women are essential to the workforce in terms of providing an active and sustainable source of labour and in June 2010, the European Council has set a new ambitious target aiming to raise to 75% the employment rate by 2020 for women and men aged 20-64, including through the greater participation of young people, older workers and low-skilled workers and the better integration of legal migrants. But, although employment rates for women are increasing, a lot still remains to be done, especially for older and younger women, to reach this goal and at the same time ensure decent work for all.

The issue of occupational safety and health (OSH) for women who work within the European Union (EU) is central to an understanding of the working environment. Previous research has shown that women's OSH has to be improved. Research from the European Commission illustrates that already in 1995, women's ill health was close to or above half of all cases, e.g. allergies (45%), infectious illnesses (61%), neurological complaints (55%), and hepatic and dermatological complaints (48%). And the situation has not improved. Further, 'women's jobs' such as those within the health and social services, retail and the hospitality sector, highlight an increase in accident rates, inclusive of fatal accidents; while women are more likely to be bullied and harassed, inclusive of dealing with sexual harassment; and have to use poorly fitting personal protective equipment as it is not sized generally for a smaller frame.

The aims of this review were to:

- Provide a statistical overview of the trends in employment and integration of women in the labour market, and explore how they impact on their occupational safety and health,
- Identify and highlight the main issues and trends regarding employment characteristics, working conditions, hazard exposure and work-related accidents and health problems for women at work and explore more in-depth selected issues not addressed thoroughly before, such as combined exposures, informal work and the rehabilitation of women into work and to,
- Identify emerging issues for OSH research and prevention of occupational diseases and accidents regarding women at work.

This focus on OSH benefits not only women, but also men who work and thus reinforces the considerable potential to be gained by improved workplaces.

2. Method

The focus of the literature review involved accessing and interpreting information and data from structured databases and peer-reviewed journals e.g. the European Union statistical databases, peer-reviewed research and reports. Moreover, the use of grey literature³ facilitated the assessment of reports and research output, that while not covered during regular searches of electronic databases

¹ EU-OSHA - European Agency for Safety and Health at Work, Gender issues in safety and health at work. A review, 2003a, Available at: <http://osha.europa.eu/en/publications/reports/209>

² Improving quality and productivity at work: Community strategy 2007-2012 on health and safety at work, COM(2007) 62 final

³ Grey literature is authoritative primary scientific report literature in the public domain, often produced in-house for government research laboratories, university departments, or large research organisations, and yet often not included within major bibliographic commercial database producers.

may allow a broader, more comprehensive assessment of the various topics under discussion. Data from outside the EU were included to supplement the information and practices on, for example, rehabilitation concerns, that were not available at the time of this review, across the EU.

The review also draws on EU-OSHA research conducted since 2004 and relevant to women at work. Information on transport, education, waste management, health care, cleaners and other service workers has been integrated here, as well as research findings on vulnerable groups such as young and migrant workers and the results of the European Risk Observatory's studies on combined and emerging risks.

The preliminary results have also been discussed at a Workshop in Brussels on December 9th, 2010, which involved stakeholders from 10 Member States and the outcomes of the Workshop are included here: <http://osha.europa.eu/en/seminars/seminar-on-women-at-work-raising-the-profile-of-women-and-occupational-safety-and-health-osh>

Key conclusions of previous EU-OSHA research

- Continuous efforts are needed to improve the working conditions of both women and men.
- Gender differences in employment conditions have a major impact on gender differences in work-related health outcomes. Research and interventions must take account of the real jobs that men and women do and differences in exposure and working conditions.
- We can improve research and monitoring by systematically including the gender dimension in data collection, adjusting for hours worked (as women generally work shorter hours than men) and basing exposure assessment on the real work carried out. Epidemiological methods should be assessed for any gender bias. Indicators in monitoring systems, such as national accident reporting and surveys, should effectively cover occupational risks to women.
- Work-related risks to women's safety and health have been underestimated and neglected compared to men's, both regarding research and prevention. This imbalance should be addressed in research, awareness raising and prevention activities.
- Taking a gender-neutral approach in policy and legislation has contributed to less attention and fewer resources being directed towards work-related risks to women and their prevention. European safety and health directives do not cover (predominantly female) domestic workers. Women working informally, for example wives or partners of men in family farming businesses, may not always be covered by legislation. Gender impact assessments should be carried out on existing and future OSH directives, standard setting and compensation arrangements.
- Based on current knowledge of prevention and mainstreaming gender into OSH, existing directives could be implemented in a more gender-sensitive way, despite the need for gender-impact assessments and attention to gaps in knowledge.
- Gender-sensitive interventions should take a participatory approach, involving the workers concerned and based on an examination of the real work situations.
- Improving women's occupational safety and health cannot be viewed separately from wider discrimination issues at work and in society. Employment equality actions should include OSH. Activities to mainstream occupational safety and health into other policy areas, such as public health or corporate social responsibility initiatives, should include a gender element.
- Women are under-represented in the decision-making concerning occupational health and safety at all levels. They should be more directly involved and women's views, experiences, knowledge and skills should be reflected in formulating and implementing OSH strategies.
- There are successful examples of including or targeting gender in research approaches, interventions, consultation and decision-making, tools and actions. Existing experiences and resources should be shared.
- While the general trends in women's working conditions and situation are similar across the Member States and candidate countries, there are also country differences within these general trends. Individual countries should examine their particular circumstances regarding gender and OSH, in order to plan appropriate actions.

- Taking a holistic approach to OSH, including the work–life interface, broader issues in work organisation and employment would improve occupational risk prevention, benefiting both women and men.
- Women are not a homogeneous group and not all women work in traditionally ‘female’ jobs. The same applies to men. A holistic approach needs to take account of diversity. Actions to improve work–life balance must take account of both women’s and men’s working schedules and be designed to be attractive to both.

3. What this report adds to the knowledge

- Women continue to be active in the workforce as shown by their increasing employment rates. However, workers with non-standard employment contracts such as part-time employment or non-permanent contracts accounted for most of the increases in employment figures and there is a trend to multiple employment to be observed. Also, the financial downturn may have an impact on the employment perspectives of especially younger women.
- Occupational segregation, overall, the concentration of female activity in a few sectors seems to be increasing rather than falling over time. The move to service sectors particularly affects women, who work in the growing sectors health care, education and retail. Consequently, if it should be effective, OSH policy should continue to address and enhance its activities for these sectors.
- However, current perceptions of vertical and horizontal segregation should be revised: when data are assessed at the micro level, they show that jobs done by men may be more segregated than those done by women. According to the latest European working conditions survey, men are now more likely to work in male-dominated jobs than are women in female-dominated ones, meaning that women are more likely to work across occupations and jobs than men, despite being concentrated in some professions. Interestingly, according to the European Working Conditions Survey, only the occupational categories ‘unskilled workers’ and ‘professionals’ (with female workers accounting for the majority of the life science, health and teaching professions) are gender balanced. This may have an impact on labour inspection policy, as increasingly, both genders should be considered when conducting inspections, allocating resources and designing OSH strategies.
- Informal work is increasing among women, which raises OSH concerns as these types of jobs are more to be likely unstable, unprotected and precarious.
- The jobs in which women work are strongly dependent on their age and origin, rather than on their educational attainment. While younger women work preferentially work in hospitality and retail, older women tend to work in health care and education. In sectors where an increasing proportion of workers are ageing, such as health care, specific policies should be developed to address the health and safety risks of these workers and enhance their work ability and wellbeing.
- The jobs in which women work and the choices they make still depend largely on their family commitments. This is also true for older women. Inversely, the practices impact on the choices they are given. As this report demonstrates, many women are involuntarily in temporary jobs, on multiple and short-term contracts and this has a high impact on their occupational safety and health.
- Women are more likely to suffer from multiple discrimination at the workplace. This may be due to gender, in conjunction with their age, ethnic background, disability and sexual orientation, while migrant women in addition face discrimination based on their origin or class. Some particularly vulnerable groups were identified in this report: young women, women with care obligations in countries where resources are limited, migrant women engaging in informal work, such as cleaning and home care, women in multiple jobs, and very young mothers. The situation of older women is also very variable depending on the country.
- At first glance, male workers often seem to be more exposed to specific risks than their female counterparts. However, when taking a more in-depth look at the data, women may have a higher level of exposure and are particularly affected by multiple exposures, as could be

demonstrated for the hotel, restaurant and catering, the health care and the cleaning sectors, but also in the traditional sectors of agriculture, manufacturing and transport.

- There is more information now than before about the types of accidents and health problems that women incur at work, which are more recognised to be directly linked to the differences in the type of work they do. Women are more exposed to slips, trips and falls and to accidents linked to violence. The differences in occupational accidents may warrant different monitoring and action: as an example, the different modes of travelling and different family obligations, may have an impact on their commuting accidents pattern that should be explored. The concept of a commuting accident may have to be revised to for example take into account accidents occurring when taking children to school before going to work, which according to some studies, remains largely a female duty.
- Women are increasingly affected by MSDs and stress. This puts into question the misconception that women's work is less physically and mentally demanding. The combination of work organisational and physical risks, the links between women's paid and unpaid work, including combined risk exposures and less freedom in time, and the difficulties in finding a stable job, and their impact on the health and safety of women should be further explored.
- Violence is a particular issue in service sectors, and is increasing. Additionally, new forms of harassment, such as cyber-harassment are an emerging issue in some sectors, for example in education. Reporting and support procedures are still lacking and female workers in personal services and working at clients premises are particularly vulnerable. Additionally, reports on violence vary considerably between Member States and may be linked to a lack of awareness.
- According to EU figures, atypical working hours are increasing in the EU, while at the same time the gender gap seems to be slightly decreasing. This may affect women more due to their family and household responsibilities as described above. If working time patterns are more irregular, this may diminish their ability to reconcile both work and private life. As an example, in the restaurant sector, 28.6% of the workers report long working days, only half (50.5%) have fixed starting and finishing times, almost a third work shifts (29.9%) and the mean working hours are among the highest. Accordingly, fewer of them report caring for children, which is also consistent with the younger age of workers in hospitality. The conditions may have an influence on their reproductive health as well as on their long-term health status and ability to work.
- While there has been a slight increase in the gender pay gap, women still receive lower wages (on average 17% less than men), and this is also the case in jobs with a majority of female workers. In line with the segregation of women in specific sectors and despite the fact that women are a majority of the workforce, the gender pay gap is important in these sectors, generally around 17-20%, although considerable efforts have been made over the past decade to narrow it. This confirms previous EU-OSHA reported findings and recommendations. A true assessment of the risks women incur at work and a modified perception of the values attached to women's work may indirectly help narrow this gap, if the contribution of women's work is equally rated and valued than men's.
- This review shows that although the number of women managers has slightly increased since 2003, women remain under-represented in management positions and in the decision-making processes within companies. Women still have difficulties in attaining senior positions within organisations sustaining the 'glass ceiling effect'. And women still mainly manage women. This also limits their possibilities to influence and shape their working conditions and actively contribute to workplace prevention at a decision level.
- Also, there is concrete evidence that lacking career advancement perspectives of women may have a direct impact on their health and safety at work, as the combination of doing the same job for a prolonged time and the characteristics of many female jobs, being repetitive and monotonous, may contribute to health and safety risks, such as stress, and diseases such as musculoskeletal disorders. On the other hand, a North American study has demonstrated that the greater involvement of women in management in agricultural enterprises due to structural changes may result in higher exposures and health risks to them, because they are handling pesticides and performing tasks previously done by men.
- Women are less often unionised and have difficulties to elect their representatives. They also have less access to OSH preventive services and may consequently be overlooked in

workplace risk assessments and when workers are consulted about their working conditions and the best OSH prevention measures to be taken at their workplaces, because they often work part-time and in temporary jobs.

- The OSH situation of women in major employment sectors has been further investigated by EU-OSHA since 2004 and reinforces the recommendation for integrated efforts in all policy fields to mainstream OSH and equality into policy action. To the previously mentioned fields of social policy and welfare, public health, employment and equality, and education and training, should be added for example transport and energy policies, technology development initiatives, and policies on environmental protection.

4. Differences between Member States

There are major differences between the EU Member States as regards the employment situation of women and the jobs they do, and how this impacts on their health and safety.

- In the Eastern Member States, women are more equally spread across occupations (they have more technical jobs), the recent rise in employment has benefited them more, as they move into better jobs, but the use of part-time contracts is very limited, and their work life balance is poor.
- In contrast to the EU-15, in the newer Member States, while men and women benefited equally well from employment growth, in terms of newly created positions for women, it focused on well-paid jobs.
- Across most of the Eastern European countries women managers are on average above 40%. For example, Latvia is one of the countries with a high percentage of women managers (51%).
- Far more women than in the EU-15 are permanently employed with > 35 hours per week than with 10 to 35 hours per week in the newer Member States. In the 10 newer Member States that accessed the EU first, in all age groups more than 50% of the women work under permanent contracts.
- In the southern countries, a high proportion of older women are still outside the labour market, and lacking accommodation for work-life balance (working time arrangements, child and elderly care facilities) puts a high strain on working women.
- In some highly developed countries such as Austria and Germany, the conceptions of motherhood and care responsibilities, lead to lacking facilities too and newly created female jobs are to a high extent part-time and precarious, and concentrated in some sectors and activities. This has a direct impact on the employment choices and the health and safety of the female workers.
- Some of the Eastern and Baltic countries, have seen a decrease in employment for some groups of female workers.
- The situation of migrant women and women in informal jobs is also very variable across countries and depends on the active policies in place to address informal work, for example in personal services.

Some countries have put in place policies to address some of the issues and mainstream gender equality and gender-sensitive action into OSH and related fields, and have achieved good results. Some initiatives are described in this report, and EU-OSHA is currently conducting an in-depth review of a selection of good practice examples.

5. Trends in female employment and how they impact on OSH

The dramatic increase in the labour force participation rates of women during the period from 1995 to 2010 was accompanied by many social, economic, and demographic changes in the status of women. Various reports have concluded that it is necessary to study the occupational safety and

health impact of the changes that have been taking place in the world of work. Some of these changes and their impact are outlined below.

The gender aspect of work remains of interest within the European Union. This is displayed through the Lisbon Strategy, which proposed the achievement of a female employment rate of greater than 60% by 2010. This review shows that across the EU, this was close to being achieved, as in 2007 the female employment rate was 58.2%. However, although the reported trends are positive, it should be kept in mind that the economic crisis hit Europe in 2008 and forced the European Union into recession. The employment rate for women, which increased continuously from 53.7% in 2002 to 59.1% in 2008, dropped for the first time in 2009 to 58.6%. Of course, due to the differences across the Member States and the newer Member States, this rate varies. More importantly than the growth in the employment rate for women, the data showed that the gap between the female/male employment rates narrowed considerably by 2009 from 22.8 to 15.5 percentage points. There was a considerably higher employment growth, almost three-fold for women than men over this time. But it was spread very unevenly across age groups: 39.1% were aged 25 to 54 and 19% were 55 to 64 years old. Young women aged 15 to 24 years accounted for only 0.3% and women older than 65 accounted for 0.6%.

Employment rates of older women vary considerably between the Member States. In 2005, the highest was in Northern European countries with more than 60%, the lowest in Southern European countries with all below 35%. Moreover, the unemployment rate shows a trend that benefits women rather than men, as female unemployment falls and male unemployment rises. However, this measure does not necessarily cover all aspects of the changing economic conditions for women, since female workers are more likely than men to leave the labour market entirely.

Employment rates of older women vary considerably between the Member States. In 2005, the highest employment rate for women was in Northern European countries with more than 60%, the lowest in Southern European countries with all below 35%.

Very young mothers with small children are a particularly vulnerable group as regards their entry into the labour market: their activity rates are much lower than for mothers older than 25. Specific measures are needed to assess the employment and potential working conditions of these very young mothers and address some of their specific needs in OSH policy and prevention, and related policies, also because they belong to a group at particular poverty risk. Their vulnerability and difficulty to access the labour market may make them more prone to accept worse conditions of work.

Very young mothers with small children are a particularly vulnerable group, Specific measures are needed to assess their OSH situation and develop targeted policies and prevention



By courtesy of Austria Labour inspection

The data highlight also that while women occupied 59% of the newly created jobs, that these gains were concentrated in the lowest pay group and in the second highest pay group within five occupational categories. However, as mentioned, in the newer Member States the situation is different: men and women benefited equally well from employment growth in terms of newly created positions but women's employment growth focused on well-paid jobs.

Within these newly created jobs, women are more likely to work in part-time roles. Part-time employment continues to be important for women, as it remains one option of dealing with child and elder care duties. In 2008, although men and women equally filled full-time jobs, 73% of those filling part-time jobs are women.

Further, older women are more likely to work part-time. They make up 37% of part-time employment compared to 12% among older men. This pattern may be assisted as women are more likely to (re-) enter the labour market when they no longer have child or elder care obligations. There is a distinct pattern to be observed in the Eastern countries, where part-time employment is uncommon: In some, notably Romania, Lithuania, Latvia, and the Czech Republic, part-time employment is decreasing for men and for women. With regard to sectors and occupations, part-time work prevails in the more service-driven sectors (e.g. health, education, and other services) and occupations (e.g. in the health care sector, service and sales workers, and unskilled workers), which are female-dominated.

It seems that female part-time workers invest their free time for paid employment in non-paid domestic work. When taking into account the composite working hour indicators – i.e. the sum of the hours worked in the main job and in secondary jobs, plus the time spent on commuting and on household work – the research finds that women in employment systematically work longer hours than men. This points to a quite clear illustration of the 'double role' increasingly played by women in the labour market and in the household. Interestingly, referring to composite working hours, on average, women in part-time jobs work more hours than men in full-time jobs. There is a need for greater recognition of the links between women's paid and unpaid work, and their effect on women's health, including combined risk exposures and less freedom in time, which are influenced by gender stereotypes.

Part-time work may also hide multiple employment. A 2005 study in France showed that over a million workers, almost 5% of the working population, were in multiple employment. For women, these jobs mostly involved child and elderly care and domestic work, where women's OSH is difficult to follow and protection difficult to implement. A German study demonstrated that 640,000 fewer women than ten years before worked full-time in 2009, replaced by over a million temporary engagements, and 900,000 mini-jobs. This was highlighted as an issue of concern by the OSH authorities.

Work patterns show also that temporary employment is increasing for women and men in most of the EU-27 countries. However, this is distributed more evenly across both genders than is part-time employment. In terms of working within a contract, this continues to be problematic with fewer workers having contracts in place. This is as low as 25% of workers in agriculture, and less than one-quarter of unskilled workers. The number of jobs within agriculture has decreased for both women and men. However, more women than men work involuntarily in the agriculture sector in fixed-term jobs. Also, in 2005, according to the European Labour Force survey over 30% of women employed involuntarily in fixed-term jobs were in education and health. Some 43% of women and 48% of men employed in fixed-term jobs involuntarily had contracts of less than 6 months.

Women remain under-represented in the decision-making processes within companies. Women still have difficulties in attaining senior positions within organisations sustaining the 'glass ceiling effect'. Fewer employees note that they have a woman as their immediate supervisor, and when women manage workers, these are generally of the same sex or less qualified personal. This has not improved significantly over the short-term, and may be perpetuated by the persisting occupational segregation, meaning the employment trends indicating that women mainly move into female-dominated jobs.

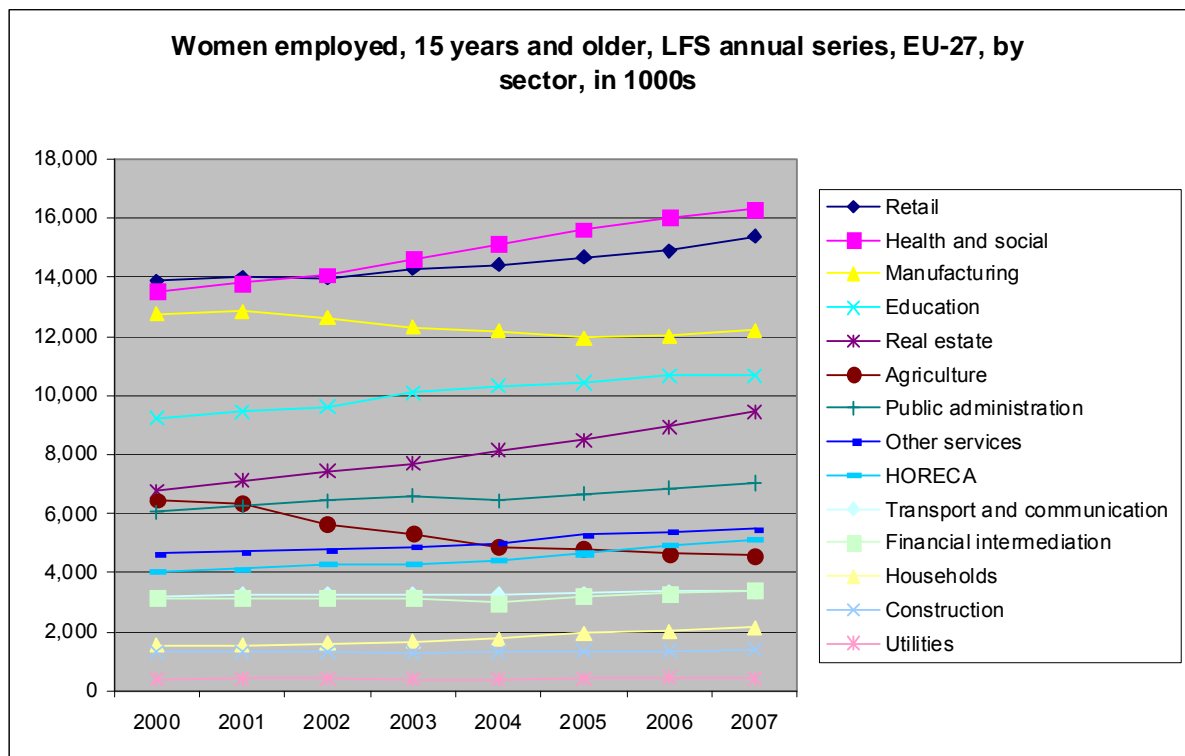
The contractual arrangements in which women are working considerably contribute to the gender pay gap, as well as reducing their chances of moving into management jobs. And the gender pay gap is growing with age: while the difference is 2% until the age of 24, it rises to 30% for women above 60.

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Occupational segregation.

Overall, the concentration of female activity in a few sectors seems to be increasing rather than falling. There has not been much positive improvement in the aggregate levels of segregation in sectors and occupations although women also continue to have more traditionally “male” jobs. The most important and steadily increasing sector for women’s employment is the health and social sector, which is ranked third in the general population. The retail sector is the second most important employment sector, both for the women and the general population. Education is ranked fourth in all sectors of employment among women and is growing. The real estate sector is a sector showing increasing employment for women and the general population. It is ranked fourth in all sectors for the general working population and ranked fifth in all sectors for women. Decreasing female employment occurs in the classical sectors agriculture and manufacturing.

Figure 1: Main employment sectors of women, EU-27, 2000 - 2007

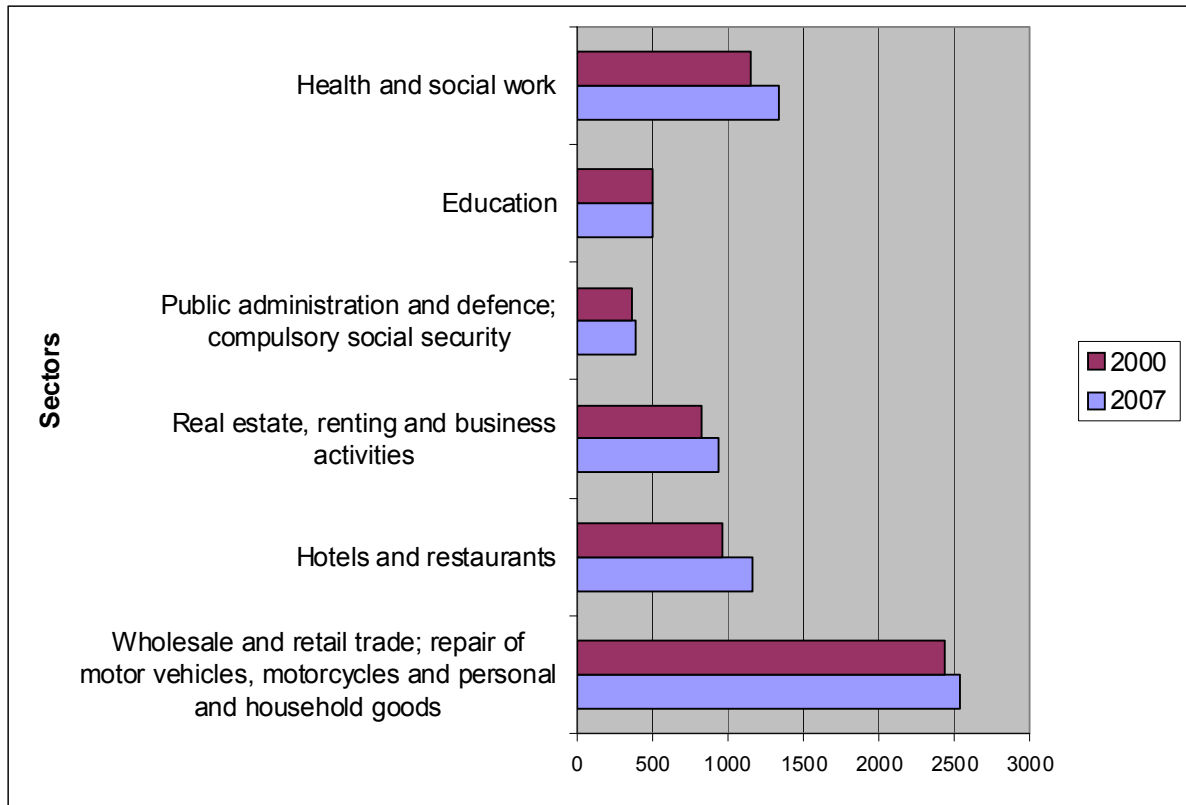


Source: Eurostat, LFS

There are very distinct patterns of employment according to the different age groups: while younger women work more in retail and HORECA (hotels, restaurants and catering), older women work more in education and health care.

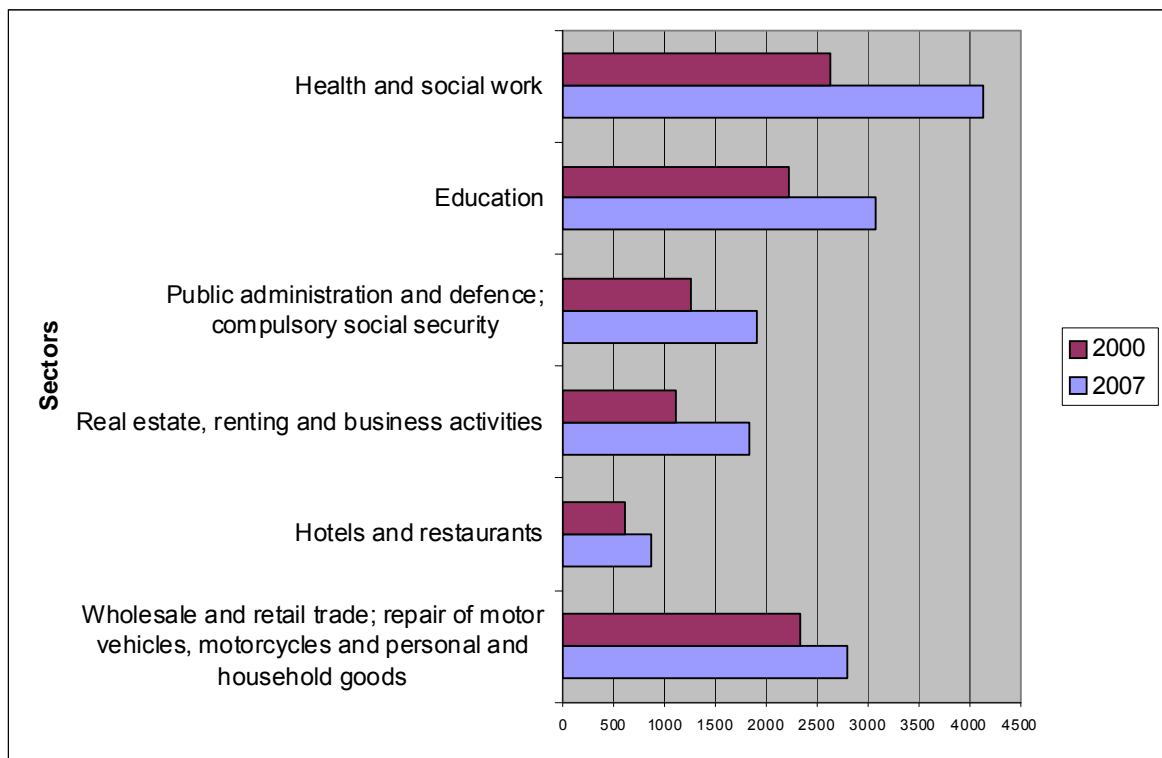
While younger women work more in retail and HORECA, older women work more in education and health care.

Figure 2: Female employment in EU-27 by economic sectors, ages 15 - 24, 2000, 2007



Source: Eurostat, 2007

Figure 3: Female employment in EU-27 by economic sectors, ages 50 - 64



Source: Eurostat, 2007

Women's move into traditional male jobs has also been slowly increasing. The most recent edition of the European working conditions survey demonstrates that more women work in male-dominated jobs than the other way round. However, research from the US shows that 'new' occupations in which women choose to work may not necessarily have the required preventions in place to reduce the risks that women face at the workplace. One study of long-haul female truckers showed less than one-third of companies with which the women interacted provided sexual harassment training, violence prevention training or had a policy for violence protection. This is confirmed by recent EU-OSHA research in the transport sector⁴, that recommended to adapt prevention policies to the increasing number of women, and include the many female service occupations in the transport sectors (caterers on trains, sports trainers on ships, cleaners) into risk assessment and prevention.

Further, women moving into traditional male professions such as construction and civil engineering may start to assume the work habits of their male colleagues (long hours, presenteeism, visibility), which will tend to maintain the status quo and not help to improve work-related outcomes such as job strain.

The choices women make professionally are also reflected in their education: Many more women than men are educated to a tertiary - or university - level in most European countries. However, there is still a marked difference between the fields of education in which women and men successfully complete (the first stage of) tertiary level programmes. While women make up a large majority of those graduating in health and welfare and teacher training and education programmes, the reverse is the case in engineering, manufacturing and construction. Overall, this may perpetuate the present segregation and should be taken into account when designing policies and allocating resources.

6. Informal work

Another source of work for women are those jobs described as informal work. Informal work could be considered as a growing 'sector' as it has an increasing rate of employment, with most of these jobs filled by women. However, informal work is hazardous for women as it makes them vulnerable to harassment and violence and exposes them to various physical risks and unfavourable working time arrangements. Precise data on employment in the informal economy is difficult to come by. As demonstrated by various studies further described in this review, this employment is difficult to measure, because it is highly complex; in addition, people involved in these activities try not to be identifiable.

Another problem is that some countries define informal employment differently; as a result the data collected only reflect a partial picture of the scope of activity that is taking place in the informal economy. For example, much of the data collected at the national level only refer to those workers whose main job or only job is in the informal economy, leaving out those who have secondary jobs in the informal economy (a number thought to be quite large in some countries). Many types of informal work and sectors are 'engendered' in the same way as they are in the 'visible', formal side of the labour market. The main features of both male and female informal workers are their insecurity and vulnerability, as well as their higher poverty risk compared with 'formal' workers.

Most people working informally, and especially women, are deprived of secure work, benefits, protection, representation or voice. A Special Eurobarometer represents the first attempt to measure undeclared work on an EU wide basis and showed that one-third to half of all suppliers of undeclared work are women. Younger people, unemployed, self-employed and students are groups that are over-represented. Household services are the most significant undeclared activity performed, including cleaning services, care for children or the elderly. Another area is the hotel, restaurants and catering industry.

Many women in rural areas are engaged in occupations which are comparable to a professional activity but are not recognised, protected or paid as such. Further, women in rural areas are more affected by hidden unemployment than men due to traditional role models and the poor endowment of many areas with the appropriate infrastructure, such as childcare facilities. Some specific risks of these women include the lack of basic rights such as holidays and insurance, a lack of information

⁴ EU-OSHA - European Agency for Safety and Health at Work, *OSH in figures. Occupational safety and health in the transport sector – an overview, 2011*. Available at http://osha.europa.eu/en/publications/reports/transport-sector_TERO10001ENC/view

about risks, preventive resources; and a lack of workers' representatives. Evening, night and weekend work are quite common in HORECA, as well as irregular shifts. These patterns, i.e., working in the evening, at night and at weekends often lead to increased tiredness and to problems with combining work and non-working life, which is more likely to affect women – child and home care duties, parental care duties.



By courtesy of Belgian public service Employment, Labour and Social Dialogue

Literature sources directly addressing OSH in the context of undeclared work were not found, neither for men nor for women. Data are often dispersed and revealed in non-official reports. Nevertheless, some information about labour/working conditions is available in the studies developed both at EU and national level, often related to sectors. As demonstrated in previous EU-OSHA research^{5,6}, there are no measurements of health status of undeclared workers (such as self-estimated health, absenteeism, work accidents, mental ill health), and they are likely to be underreported in occupational statistics

The particular challenge for OSH prevention regarding undeclared work remains the inaccessibility of the workers and of their workplaces for labour inspections. The particular combination of uncontrolled workplace exposures, precarious labour relations, fear of losing one's job, lack of knowledge about rights, lack of representation make it difficult to reach these workers. Knowledge about OSH in sectors typically viewed as having a high percentage of female workers and activities where informal work is more prevalent is a good starting point to know the risks and health problems women face when working undeclared.

Whereas implementation in agriculture and HORECA may be easier, traditional approaches to implementation of workplace legislation fall short of measures in some areas, such as home services, as it is difficult for labour inspectors to access private homes. A recent Eurofound report⁷ provides an

⁵ EU-OSHA - European Agency for Safety and Health at Work, European Risk Observatory, Literature study on migrant workers, 2007. Available at: http://osha.europa.eu/en/publications/literature_reviews/migrant_workers/view

⁶ EU-OSHA - European Agency for Safety and Health at Work, Protecting workers in hotels, restaurants and catering, 2008b. Available at: http://osha.europa.eu/en/publications/reports/TE7007132ENC_HORECA

⁷ European Foundation for the Improvement of Living and Working Conditions, EIRO thematic feature. Industrial relations and undeclared work, 2005. Available at: <http://www.eurofound.europa.eu/publications/htmlfiles/ef05135.htm>

up-to-date evaluation of current different approaches and measures used in the 27 EU Member States to tackle undeclared work. Some policy measures are applicable to typical female activities, mainly those related to household services. Service vouchers to buy services at a lower price, or widespread childcare facilities to eliminate this sector from the undeclared economy can be seen as an example. In Slovenia, the above-mentioned activities and art crafts work and similar activities were identified as 'personal supplementary work' in a Regulation that established a procedure to notification. This is first step towards implementation of legislation incl. OSH regulations. These measures could be complemented with OSH measures as have already been proposed in some Member States, for example in home care, providing basic guidance on how to protect workers who with increasing ageing of the European population, provide such services in private homes. Clients of such services should be included in the target groups for OSH information and campaigning for prevention in these sectors, as should the organisers of such services.

Female migrant workers

One growing trend to affect the OSH of female workers is the rising migration rate of women, which is close to that of men. Migrant women workers may face double or triple discrimination and when they work 'informally', become one of those vulnerable categories of workers. Other groups include unemployed people, the self-employed, seasonal workers, students and children, many of which would reflect a higher number of women. An increasing trend includes those women who engage in domestic work or as cleaners. In Europe, it is estimated that around 30% of cleaning workers are migrant workers, but this may be a low estimation. Women in these sectors, may not speak the language of their employer, may not receive training nor OSH information, have to work long hours and may be asked to do tasks without the use of the right equipment and may be subjected to harassment, violence, victimisation, discrimination and low pay.

7. Accidents at work

The fact that men are more likely to experience accidents at work, due to their involvement in more 'high accident risk' sectors, has not changed, and overall, there has been a decrease in the rate of accidents. According to a recent EU study^{8,9}, when women do experience accidents, they are more likely to occur when they work within 'agriculture, hunting and forestry', 'hotels and restaurants' and 'health and social work'. In contrast to the accident rates, the rates for work-related health problems are similar in both genders. Female workers with work related health problems most often report musculoskeletal disorders (MSDs; 60%), with 16 per cent reporting symptoms of stress, depression and anxiety.

There is another difference between the genders: Among men accident levels seem to taper off with age, while there was nearly no influence of age on the percentage of female workers who suffered an accident.

Among men accident levels seem to taper off with age, while there was nearly no influence of age on the percentage of female workers who suffered an accident. This difference should be further analysed.

There is also a methodological issue to be raised: A 2002 Eurostat study¹⁰ found that the difference between women and men was smaller when incidence rates were calculated on a full-time equivalent basis, because women worked part-time more often than men and were therefore less time exposed to the risk of accidents. If the incidence rates were additionally standardised for the different

⁸ Eurostat, *8.6% of workers in the EU experienced work-related health problems* - Issue number 63/2009, European Communities, Office for Official Publications of the European Communities, Luxembourg, 2009e. Available at: http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-09-063/EN/KS-SF-09-063-EN.PDF

⁹ Eurostat, *Health and safety at work in Europe (1999-2007)*, Statistical books, Population and social conditions. Available at http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-31-09-290

¹⁰ Dupré, D., 'The health and safety of men and women at work', Statistics in focus, Theme 3 – 4/2002, Eurostat, Luxembourg. Available at: http://www.eds-destatis.de/en/downloads/sif/nk_02_04.pdf

occupations in which women and men work, the incidence rates were nearly equal in Denmark, Ireland and UK. Unfortunately, these standardised data are not available from Eurostat for other years.

A 2002 Eurostat study¹¹ found that the difference in accidents rates between women and men was smaller when they were calculated on a full-time equivalent basis, because women worked part-time more often than men and were therefore less time exposed to the risk of accidents. If they were standardised for the different occupations as well, the incidence rates were nearly equal.

There is more information now than before about the types of accidents and health problems that women incur at work, which are more recognised to be directly linked to the differences in the type of work they do. Women are more exposed to slips, trips and falls and to accidents linked to violence.

In an exploratory Eurostat study looking at the causes and circumstances of accidents the most frequent types of deviation in women were 'slipping, stumbling and falling' causing 29% of the severe accidents in 2005, 'body movement under or with physical stress' with 21%. Women significantly more often suffered accidents involving 'Office equipment, personal equipment, sports equipment, weapons and domestic appliances' and 'Living organisms and human-beings'. This seems to be linked to the occupations and sectors in which they work, and also means that accident prevention needs to be refocused to address the circumstances relevant for these accidents if it is to be effective for female workers.

Some of the characteristics of work that women do, for example work organisational issues such as monotonous and repetitive work leading to fatigue, interruptions (considerably more frequent in female jobs), lower autonomy, together with less access to training, may also lead to increased accident risk.

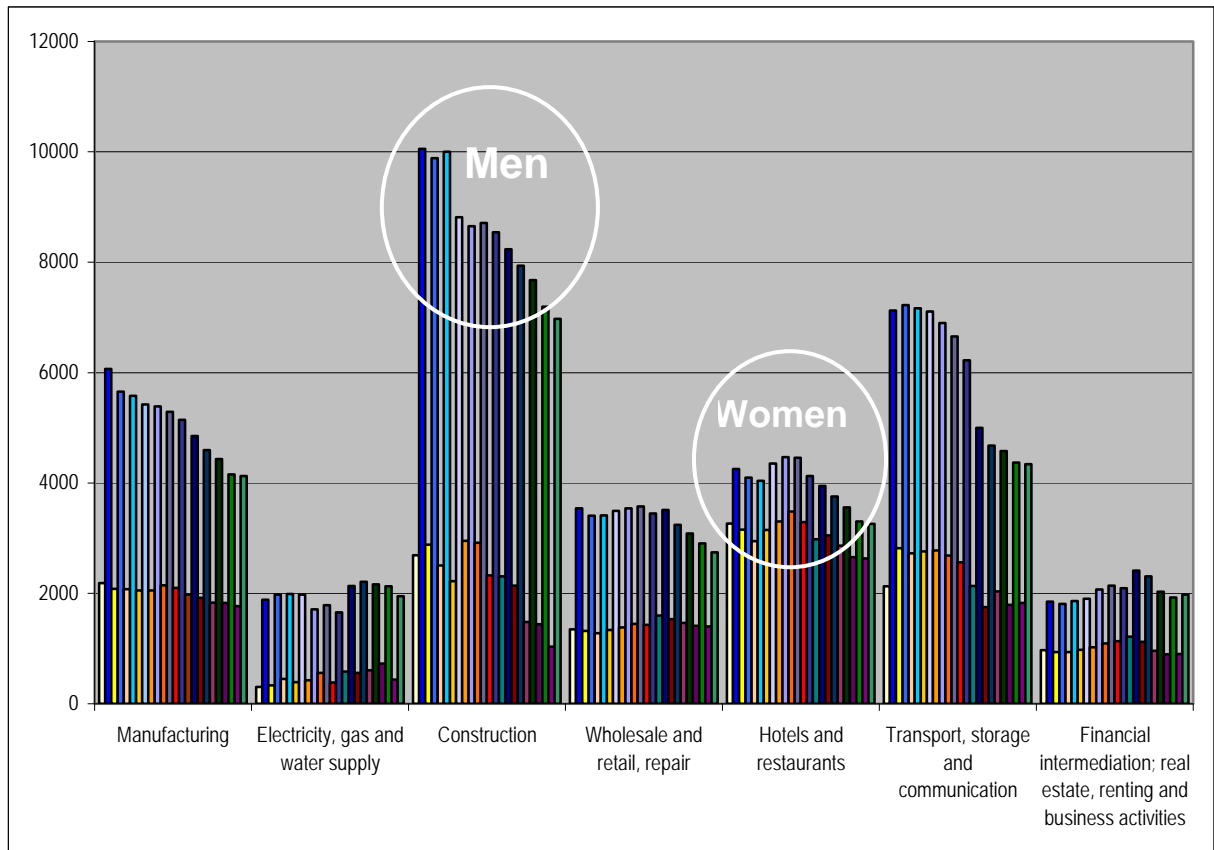
Women significantly more often suffer slips, trips and falls and accidents involving 'Office equipment, personal equipment, sports equipment, weapons and domestic appliances' and 'Living organisms and human-beings'. This is linked to the occupations and sectors in which they work.

Economic sectors with the highest incidence rates of accidents for women were 'agriculture, hunting and forestry', 'hotels and restaurants' and 'health and social work'. Due to the high percentage of women working in services, the highest absolute numbers were found in the sectors 'public administration, education, health and other services'. Eurostat does not publish incidence rates for accidents in public administration, education, health and other services (NACE L-P). Although it is due to methodological problems that are difficult to overcome, it is regrettable because over 45% of employed women work in these sectors. In the 'agriculture, hunting and forestry' sector and in the 'health and social work' sector we find both a high accident rate and a high prevalence of work-related health problems.

Eurostat does not publish incidence rates for accidents in public administration, education, health and other services (NACE L-P). Although it is due to methodological problems that are difficult to overcome, it is regrettable because over 45% of employed women work in these sectors.

¹¹ Dupré, D., 'The health and safety of men and women at work', Statistics in focus, Theme 3 – 4/2002, Eurostat, Luxembourg. Available at: http://www.eds-destatis.de/en/downloads/sif/nk_02_04.pdf

Figure 4: Standardised incidence rate of accidents at work by economic activity, severity and sex (per 100 000 workers), EU-15, 1995-2006, ESAW, Eurostat



Source: Eurostat

Commuting accidents and accidents when driving for work

On average, people, regardless of gender and aged from 20 to 74 spend at least 1 to 1.5 hours per day travelling to and from work. However, the modes of travelling differ between the genders. Female workers seem to use a private car less often and seem to spend more time walking than their male counterparts. The different modes of travelling and different family obligations, may have an impact on their commuting accidents pattern that should be explored. The concept of a commuting accident may have to be revised to for example take into account an accident occurring when taking children to school before going to work, which according to some studies, remains largely a female duty.



Josu Gracia - EU-OSHA photo competition 2009

8. Exposures, health problems and occupational diseases

The occupational health risks of female workers tend to focus on their exposure to material, physical and ergonomic hazards, as well as intimidation and discrimination at work. These types of exposures are especially high for those women who work within the 'agriculture', the 'hotels, restaurants and catering', the 'transport' as well as the 'manufacturing' sectors. In addition, women within the manufacturing sector report high rates of exposure to vibrations, which is a risk that is not normally attributed to 'female workplaces'. Further, although initially it may seem that male workers are more exposed to specific risks than their female counterparts, due to female workers being segregated largely into fewer sectors and often performing different tasks than men, they may be more exposed in some instances than their male colleagues. According to the Fourth European Working Conditions Survey, on average, substantially more male (43.0%) than female (25.0%) workers have to carry or move heavy loads at work. However, the exposure to jobs involving lifting or moving people has a higher prevalence among female workers (11.1%) than for male workers (5.8%) and is of course one of the main factors in health and home care.

One of the risk factors where exposure of women remains under assessed is noise at work, which still contributes to a high proportion of occupational diseases, mainly recognised for male workers. Generally, women appear to be more exposed to medium levels of noise, with the exception of known high-noise sectors, such as in the textile and food production sectors. Moreover, women are occasionally exposed to sudden and disturbing noise, which can be considerably higher than for male workers. This is particularly the case for the female-dominated education, health, hotel, restaurant and catering and social sectors as well as for jobs in call centres and other offices. A high proportion of women in these sectors report tinnitus, and a considerable proportion of them also suffer voice disorders. Interestingly, according to a 2004 EU-OSHA study¹², the proportion of women reporting that they have to suffer from noise was higher in the newer Member States than in the EU-15. Noise levels may be high in some occupations, such as in nurseries and kindergartens, in emergency wards of hospitals or in school workshops, where they may be above the permissible occupational exposure limits. Medium- and high level noise may also lead to circulatory diseases and contribute to work-related stress.



By courtesy of INSHT

¹² EU-OSHA - European Agency for Safety and Health at Work, 2005, Noise in figures. Available at: <http://osha.europa.eu/en/publications/reports/6905723/view>

Generally, male workers seem to be more exposed to vibration than their female counterparts at first glance. However, since female workers are more segregated into fewer sectors and often perform other tasks than men, the data should be extracted by sectors and occupations. When specifically assessed by the data, 30% of female workers are exposed to vibration in manufacturing. Accordingly, vibration should be regarded as a priority for prevention in women workplaces in industry. Female workers may also be exposed to high noise levels and ergonomic risks in the relevant sectors, for example, as mentioned previously, in agriculture, food production or the textile industry; sectors where both noise and vibration levels are high and work is physically demanding.

Mental health problems - an emerging issue

Within the Labour Force Survey 2007 ad hoc module on accidents at work and work-related health problems 8.6% of workers in the EU-27 (excluding France) reported one or more work-related health problems during the 12-month period before the survey. Rates were similar for female and male workers. The prevalence of work-related health problems increased with age for both genders from approximately 3% in the age group 15-24 to nearly 12% in the age group 55 - 64. This is in contrast to the frequency of accidents at work, which remained nearly constant in women and declined with age in men. Within the group of female workers with a work-related health problem, 60% reported musculoskeletal disorders (MSDs). Stress, depression and anxiety were reported by 16% of the women and headache and/or eyestrain by 6%. All other illnesses or complains were reported by fewer than 5% of the women.

Across the EU there is an observed trend of increasing absenteeism and early retirement due to mental health problems, particularly in relation to stress and depression. Women are particularly affected by this trend. The Mental Health Foundation (2007)¹³ suggests that women are particularly exposed to some of the factors that may increase the relative risk of poor mental health, because of the role and status that they typically have in society. Some of the key social factors that may affect women's mental health include: more women than men act as the main carer for their children and they may care for other dependent relatives too – intensive caring can affect emotional health, physical health, social activities and finances

- women often juggle multiple roles – they may be mothers, partners and carers as well as doing paid work and running a household
- women are over represented in low income, low status jobs (often part-time), and are more likely to live in poverty than men
- poverty, working mainly in the home on housework and concerns about personal safety can make women particularly isolated

The characteristics of their work, lack of career progression, multiple jobs, work intensification and lack of autonomy contribute to higher strain and higher stress levels.

Women more than men encounter violence and harassment when at work, and the risk is increasing.

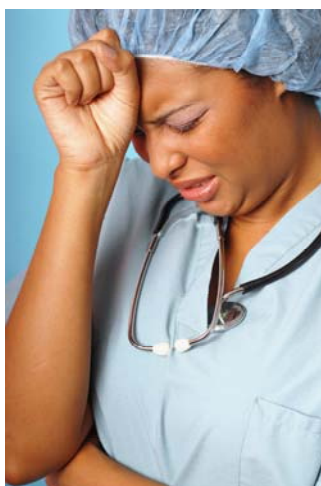
According to the latest European workers' survey, women have a higher psychosocial risk because they work in jobs where there is more direct contact with clients. Women reported slightly higher levels of unwanted sexual attention, threats, humiliating behaviour, sexual harassment and bullying, while men reported higher levels of physical violence at work.

Recent EU-OSHA research on the transport sector had similar findings and illustrates some of the major issues. While workers were increasingly exposed to violence, the possibilities for reporting and tackling violent incidents were limited. Transport workers were often found to be at the forefront of reorganisation and acting as interfaces communicating organisational changes to the clients, and therefore exposed to angry reactions and harassment. The report therefore recommended to implement and improve reporting procedures, include in general OSH management the prevention of violent incidents and harassment by customers, and to offer more support to the workers. Regarding

¹³ Mental Health Foundation (2007). Women and Mental Health. Retrieved 20 December 2010, from <http://www.mentalhealth.org.uk/help-information/mental-health-a-z>

female workers, the report found a lack of adaptation of physical and organisational conditions to female workers and recommended urgently to implement changes. One study referenced in the report found double (racial and gender) discrimination of female public transport staff. Transport jobs with an increasing proportion of female workers were school bus drivers, public transport, taxi and courier services. Additionally, while often exposed to similar risks, support and administrative female staff were often overlooked. Typical examples are cleaners and office workers in the transport sector, but also hospitality workers on ships or trains.

EU-OSHA research on the transport sector found a lack of adaptation of physical and organisational conditions to female workers and recommended urgently to implement changes. Transport jobs with an increasing proportion of female workers were school bus drivers, public transport, taxi and courier services. Cleaners and office workers in the transport sector, but also hospitality workers on ships or trains were often overlooked.



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In general, the risk of experiencing both threats of violence and violence are greatest in the healthcare sector, public administration and in defence, but other occupations are also seeing an increase in violence. There are considerable differences between the various Member States; these differences may be due to underreporting in some countries and to greater awareness in others. One of the occupations at risk is teaching, in which women make up 70% of the profession and one in which one-third of the six million teachers in the EU are over the age of 50. The violence in school could emanate from several sources - from pupils, from the parents of pupils and from other teachers. However, this is not a well-researched area and more research needs to be done into the causes, consequences and to generate possible solutions to address violence in schools. Cyber-harassment, as a relatively new form of bullying, the use of information and communication technologies for repeatedly deliberate and hostile behaviour by an individual or a group, with the intention to harm others, is prevalent among teachers. It ranges e.g. from continuous e-mail-sending, threats, subject of ridicule in forums to posting false statements. A survey among national teacher organisations revealed that the most frequently cited cause of cyber-harassment was gender, followed by racial or ethnic origin, sexual orientation, age, disability, religion and belief.

A recent EU-OSHA review on violence and harassment at work¹⁴ also provides an in-depth review of data from the different Member States and EU-OSHA has provided advice on how to organise OSH prevention and examples of good practice in several of its information products. The report presents the prevalence of violence and harassment at work based on international and national statistics, as well as the results of scientific studies on antecedents and consequences of work-related violence. A survey of the Agency's Focal Point network suggest that there is still an insufficient level of awareness and recognition of problems with third-party violence and harassment in many EU Member States, and there is a clear need to promote and disseminate good practice and prevention

¹⁴ EU-OSHA - European Agency for Safety and Health at Work 2011. Available at: <http://osha.europa.eu/en/publications/reports/violence-harassment-TERO09010ENC/view>

measures which are sensitive to the national context. Some measures proposed by EU, ILO, WHO and national experts are included in the report.

Another gender difference can be found regarding unwanted sexual attention. Sexual harassment is reported three times more often by female than by male workers in Europe. The gender difference is even clearer when results are viewed at the country level. Young women aged below 30, and women in white-collar occupations – particularly in management – are especially at risk of unwanted sexual attention. Moreover, women on fixed time contract or temporary agency workers (5%) report higher levels than those on indefinite contracts (2%).

Discrimination and harassment often go hand in hand: Interestingly, almost 42% of the females who reported experiencing age discrimination also cited acts of bullying or harassment at the workplace. This proportion can be compared with an overall average incidence of bullying or harassment of about 6% among female workers. Moreover, almost 23% of women who experienced age discrimination also reported gender discrimination, compared with about 2% of female workers overall.

Workers who experience violence or bullying at the workplace have more work-related health problems than those who do not. The potential exposure to occupational violence was found to be associated with a significant increase in the potential risk of both depression and stress-related disorders in both women and men. The relative risk was found to incrementally increase with increasing prevalence of violence and threats. Violence and harassment at work has immediate effects on women: including, a lack of motivation, loss of confidence and reduced self-esteem, depression and anger, anxiety and irritability, and may contribute to the development of musculoskeletal disorders. These symptoms are likely over time to develop into physical illness, mental disorders, and may culminate into an increased risk of occupational accidents, invalidity and even suicide.

Furthermore, women who work at their clients' premises may be particularly vulnerable to being attacked, whether physically or psychologically. The scope for adapting their conditions may be limited and they may work in several jobs and for several employers. Policy and prevention needs to address the specific situation of these women and identify ways for enforcing the principles of OSH legislation for them and demonstrate how they could be better protected. How to reach these workers and consult them about their specific situation may be a particular challenge for inspection and prevention services.

Women returning to work from caring responsibilities often have to suffer from discrimination such as finding only limited job responsibilities, unfair work allocation and/or denying them access to specific tasks. Women who work part-time, shifts and on non-standard working times schemes may be left out of the equation and not be addressed by prevention efforts.

Managers and workers need training to know how they can most effectively address violence harassment and effective management also includes information to the customers and wider public. Lone-workers safety systems are applied in other areas of industry. They could also be adapted to the specific needs of female-dominated service sectors.

Musculoskeletal disorders - an increasing health problem

MSDs and work-related stress remain more of a concern for women than for men (as shown in previous EU-OSHA research). They may also interact to aggravate the problems.

As such, the lifting of heavy loads or people remains a risk for women workers, especially for those who work in health care or those who do informal work. For example, as shown in this review, a German study found that health care workers carry more than construction workers. Overall, the data reflect those misperceptions that continue to exist about what is strenuous work, especially for those jobs mainly done by women.

When extracting the data by sectors and occupations, in order to be able to find out whether women are exposed to specific risks, interesting results occur. As an example, carrying or moving heavy loads affects on average 5.8% of the workers, but when looking at the female-dominated health care sector, it affects almost half the working population (43.4%), an effect suppressed by a general averaged appreciation of the situation. Considering that the main group in the health care sector is characterised by middle-aged to older women, this highlights the need for them to be considered for prevention.

The different female-dominated sectors show distinct patterns of exposure to risk factors that have been related to MSDs and this should be taken into account when designing OSH prevention and action for these workplaces. While in the hospitality and retail sectors, jobs tend to be more monotonous and repetitive, with less training needs reported and less learning opportunities, jobs in the health sector, public administration, and education seem to be characterised by complex tasks, higher training needs reported and more learning opportunities. Team working and task rotation are quite common in the health sector, while the education sector is rather characterised by lone work. In education, public administration and education workers report to have to solve problems more often than do workers on average.

Regarding recognised occupational diseases, while the incidence rate of MSDs is lower in female than in male workers with the exception of the carpal tunnel syndrome and hand and wrist tenosynovitis, looking at all occupational disease, MSDs make up a much higher proportion of all recognised occupational diseases among female workers than among male workers. The prevalence and incidence of MSDs differ by occupational sector among women.

Research by EU-OSHA has shown that the MSD risk of women may be underrated, and that specific diseases linked to prolonged standing and sitting and static postures may be left out of the picture. But some Member States have designed effective programmes to tackle static work, for example in office jobs.

Recent research by EU-OSHA¹⁵ has shown that the MSD risk of women may be underrated, and that specific diseases linked to prolonged standing and sitting and static postures may be left out of the picture. For example, French researchers found that certain jobs were linked to an increased risk of osteoarthritis in the knees, hips and hands; the workers found to be most at risk were female cleaners, women in the clothing industry, male masons and other construction workers, and male and female agriculture workers. This is why the report recommended to extend national worker surveys to include lower-limb symptoms, for example pain in legs, hips and knees, into the assessments and to record static postures, prolonged standing and sitting and their health effects. Static work is not currently assessed, and the related health effects are under researched. Some national surveys address these risk factors and demonstrate that women may be considerably affected by them, a fact that is currently left out of the general European picture.



By courtesy of INSHT

Many of the MSD problems experienced by women workers can be exacerbated when work equipment (such as desks, chairs and factory benches) are designed to meet the ergonomic needs of the average male. Gender insensitivity to the manner in which work and workplaces are designed could contribute to excess of repetitive strain injury among female employees.

Static work may affect women particularly as more women than men work in the public service and in office jobs. With computers and the use of email, many of the reasons people used to move around the office no longer exist. The everyday tasks that used to be a routine part of office work - hand delivering documents, walking over to co-workers to discuss issues or share work - can now be accomplished with a simple mouse click. No movement is required. There are examples of good practice to address these problems. The German Initiative New Quality of Work developed a brochure to offer advice to workers who spend much of the day sitting for long stretches of time, to help get them up and moving - often. Basic information is given on how to incorporate appropriate work organization into the office workplace design including 'dynamic' furniture to make it more motion-friendly. It provides

¹⁵ EU-OSHA – European Agency for Safety and Health at Work, OSH in figures: Work-related musculoskeletal disorders in the EU – facts and figures, 2010. Available at: <http://osha.europa.eu/en/publications/reports/TERO09009ENC>

guidance on how workers can alternate work postures, and offers dynamic solutions for frequent movement to help workers stay healthy. It is EU-OSHA's role to collect such examples across Member States and help in promoting and sharing these positive experiences.

In some Member States, rates of MSDs are also increasing among young workers. This should be explored to target prevention at young women and tailor it to their specific conditions at work.

In some Member States, rates of MSDs are also increasing among young workers. This should be explored to target prevention at young women and tailor it to their specific conditions at work.

Alongside understanding the role of work-related risk factors for MSDs faced by women workers, it is also important to identify and understand the nature of risk factors faced by women at home and how these contribute or interact with those risk factors in the workplace. Risk factors at work (repetitive work and poor ergonomic equipment) and factors at home (having less opportunity to relax and exercise outside of work) may help explain the observed gender difference in symptom severity.

There is a perception that the invisibility of risks is natural for women, and this is facilitated by the stereotyping of the effects of the distribution of risks. For example, it is accepted that women who work as nurses and teachers will cope with their workload, as part of the natural condition of being mothers, sisters and spouses, and so are better conditioned to deal with, for example, difficult patients. The 'risk' therefore has traditionally tended to be ignored in such situations.

What can be concluded is that not only regarding physical risks, but also regarding organisational risks, the definite conditions of work need to be considered when risk assessment is carried out.

Avoiding assumptions is key to setting the appropriate prevention measures and providing the many female workers in these sectors with appropriate training and support.

Women's exposure to dangerous substances remains largely unexplored

This review also found that exposure to dangerous substances remains under assessed. The European Working Conditions Surveys over the last 20 years revealed that female workers are more often exposed to infectious materials such as waste, bodily fluids and laboratory materials at work, and female workers report more infectious diseases than their male counterparts.

Among the exposures to dangerous substances, handling chemical substances and infectious materials can mainly be found in the female-dominated health sector, but also in other service occupations. These exposures are often overlooked. Moreover workers in service sectors, such as health care, hairdressing and cosmetology may also be exposed to dangerous carcinogens at work. In 'green jobs' in waste management women may also be exposed to asbestos and silica dusts, as well as to a variety of chemical substances and biological agents, Food manufacturing and textile and leather industries are other sectors where women may be exposed to a variety of chemicals and biological agents.



By courtesy of INSHT

Women are generally not considered to be exposed to carcinogens as men are, but may very well be so in specific occupations, for example dry cleaners exposed to trichloroethylene, dental workers exposed to beryllium, health care workers exposed to hepatitis virus, which may cause liver cancer, or to cytostatic drugs, or manufacturing exposed to silica or mineral fibres, This is also reflected in the low number of notified occupational diseases, although with wider screening and monitoring national figures have revealed a slow increase in notified mesothelioma cases in women.

Exposures in these occupations, but also in other tasks such as cleaning may be varied and are often unpredictable. This is why it is crucial to avoid assumptions about what women are exposed to and to apply the same principles of risk assessment, substitution and elimination, and the hierarchy of prevention measures as defined in EU prevention approach as for other workers. The table below provides an overview of the many exposures that women may incur.

Table 1: Examples of potential exposures to dangerous substances for female workers

Substance	Source	Circumstances	Occupation, task
Solvents	Cleaning products Fuels Ambient air Paints, inks, glues and varnishes Cosmetics Resins and glues Drugs	Cleaning Dry-cleaning of textiles Printing Laboratory work Handling medication Fabrication of dental and optometric devices	Manufacturing Leather industry Textile industry Cleaners and dry-cleaners Hairdressers Service workers on ships, trains, buses Printing Laboratory work, pharmacists, chemists
Disinfectants	Cleaning products Health care products	Cleaning work areas Disinfection in health care	Health care workers Cleaners Maintenance workers
Cosmetic products		Hairdressing Domestic care Health care	Hairdressers Health care workers
Dusts, particles	Dangerous goods Textile fibres (e.g. cotton) Food stuff (grain dust, dust from stored foodstuff)		Textile workers Workers in Cleaners and dry cleaners Maintenance workers
Pesticides and storage chemicals	Foodstuff Storage Plants Animals	Agriculture and farming Horticulture Workers who handle goods from containers and in storage areas	Farmers, and agricultural workers Gardeners Retail Cleaners

Risks and trends in the safety and health of women at work

Substance	Source	Circumstances	Occupation, task
Flammable and explosive substances	Solvents (see above) Fuels	Cleaning, dry-cleaning Handling solvent-containing products Accidents and spills Maintenance Refuelling	Cleaners, dry cleaners Manufacturing workers Maintenance workers
Exhaust fumes Diesel exhaust and particles	Exhaust from combustion engine, incl. diesel and other engines on trucks, ships, trains and buses	Unintentional contact when loading and unloading Maintenance Refuelling Parking areas of vehicles	Maintenance workers Retail workers Drivers, delivery and cargo workers Workers on mission Transport workers
Sensitising substances	Foodstuff, perishable goods Cleaning agents		Catering, cooks Cargo workers Cleaners
Biological and infectious agents	Animals Foodstuff, perishable goods Insects and other vectors Contact with passengers, patients, clients	Cleaning Contact with foodstuff Contact with infected clients and goods Contact with animals Cuts and stings Contact with infectious agents when travelling abroad	Farmers and agricultural workers Cleaners Service and maintenance workers Health care staff Hairdressers Catering staff Teachers and kindergarden workers Retail workers Home care
Lead and other metals	Manufacturing of electronic devices Dental care Optometrists	Manufacturing of dental prostheses, eyeglasses, electronic devices	

Risks and trends in the safety and health of women at work

Substance	Source	Circumstances	Occupation, task
Carcinogenic substances			
Drugs	Cytostatic drugs		Health care
Asbestos	Insulation materials Waste management		Waste handlers Maintenance and cleaning workers Relatives of asbestos workers
Formaldehyde	Cosmetics Health care products		Hairdressers and associated professions Health care
Trichloroethylene	Cleaning, dry-cleaning Manufacturing		Cleaners and dry-cleaners Manufacturing
Beryllium	Dental workers		Fabrication of dental prostheses
Mineral fibres	Waste management Manufacturing of glass and objects made of glass		
Rubber constituents	Retail Manufacturing		
Ethylene oxide	Health care	Disinfection of medical devices	
Crystalline silica	Workers exposed to dust and ambient dust Sanding of manufactured textile and other products	Sanding of textiles Abrasive treatment of silica generating materials, such as glass	Manufacturing Textile industry Cleaners, e.g. on construction sites or from contaminated clothing
Tobacco fumes	Hotels, restaurants and catering		
Carcinogenic solvents	Manufacturing, e.g. of shoes and leather products Laboratories	Use of paints and glues Use of organic solvents	Shoe and leather manufacturing Laboratory workers, chemists
Carcinogenic dyes	Textile industry Hair dyes	Dyeing of hair and textiles	Textile industry Hairdressers
Carcinogenic soldering fumes	Manufacturing of electronic devices		
Radioactive substances	Health care Laboratories		
Asbestos-containing talcum			

Substance	Source	Circumstances	Occupation, task
Diesel fumes	Vehicles, incl. in storage areas	Working in storage areas Workers driving and attending vehicles	Transport workers Retail workers Workers on mission, Cleaners in areas with high vehicle frequency

Gender differences in uptake and metabolism of dangerous substances have been further explored: it has been found that women on average have smaller body dimensions than men, which equates to a smaller surface for chemical exposure through the skin. However, despite this smaller surface their organ blood flow is relatively higher, thereby increasing the rate at which chemical substances circulating in the blood reach the tissues and their renal clearance is slower than men's which reduces their capacity to emit toxic compounds. As such, the gender perspective in exposure is therefore most relevant.



By courtesy of the Austrian Workers' Compensation Board

Scientific evidence increasingly shows that some industrial chemicals, known as endocrine-disrupting compounds (EDCs), or hormone disruptors, can have considerable effects on the workers and act on the offspring, particularly if exposure occurs during foetal development. Other stages of rapid development are also vulnerable to hormone disruption. With exposure, women and girls are at greater risk for developing reproductive health problems such as early puberty, infertility, and breast cancer

Occupational diseases and cancer in women

Information on the occurrence of occupational cancer in women is still scarce. Although recently the recognition of night work as a major cause of breast cancer has led to a breakthrough, allowing for organisational factors to be considered as leading cause for diseases normally attributed to dangerous substances. This review also confirms that cancer assessment and exposure monitoring

for carcinogens as well as occupational diseases lists are still strongly focused on male jobs and male exposures.

One ongoing French study found similar rates of occupational cancer occurring in both genders from exposures to at least three different carcinogens. Recognised mesothelioma cases in women are also increasing, and a possible link between cancer and occupational exposure to chemicals has been established for women in some service occupations, such as middle-aged health care workers, hairdressers and textiles and home services workers.

But recognition rates are still very low and so is the state of knowledge about the exposures that may lead to occupational cancer in women. In the US, NIOSH continues to study the linkages between the following hazardous substances and cancer in women (especially breast and cervical); ethylene oxide (ETO) which is used to sterilise medical supplies, and in 2001, it was estimated that more than 100,000 women in the US workplaces were exposed to ETO; Polychlorinated biphenyls (PCBs), a compound previously used in the electrical industry and banned since 1977. However, products made with this compound remain in the workplace and in the environment, and as such workers are exposed still to the compound; and perchloroethylene: Women who work in the dry-cleaning industry are exposed to perchloroethylene as it is the main solvent used in this industry.

Earlier studies finding that female flight attendants were at an increased risk of developing all cancers, of melanoma and breast cancer were confirmed.

A recent study¹⁶ has demonstrated that awareness may be key: a detailed analysis of national data on occupational diseases shows that diseases of female workers are significantly less often notified and when they are notified, recognition rates are much lower. Many diseases are not assessed for their occupational component. The link between occupational exposure and disease is also much less explored for female workers, leading to omission of risk factors relevant for women from the overall assessment. This calls for a better assessment of chemical-related cancer diseases in women.

A detailed analysis of national data on occupational diseases shows that diseases of female workers are significantly less often notified and when they are notified, recognition rates are much lower.

As noted, women more often work part-time. These types of workers tend to have less access to training, less control over their work, and less access to preventive services. These factors all increase their exposure. In that way, broader issues may considerably influence the health and safety situation and the possibilities of these workers to cope with their exposure. Also they may be left out of relevant research and therefore overlooked.

9. Combined exposures

This review attempted to explore literature describing combined exposure to women at work. A recent EU-OSHA review¹⁷ addressed combined exposures to noise and ototoxic substances and found that they could be relevant to women in various sectors and occupations, in manufacturing sectors with a higher proportion of female workers, such as food production and textile industry, but also in service sectors such as hotel, restaurant and catering and health care, or in industrial cleaning and maintenance. Combined exposures of noise and chemicals may lead to neurotoxic effects.

The European Risk Observatory's emerging risks reviews have also highlighted combined exposure as a particular issue for research, and particularly for workers in service professions.

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¹⁶ Women and occupational diseases in the European Union, Daniela Tieves, ETUI, 2011

¹⁷ EU-OSHA - European Agency for Safety and Health at Work. Combined exposure to Noise and Ototoxic Substances, 2009b. Available at: http://osha.europa.eu/en/publications/literature_reviews/combined-exposure-to-noise-and-ototoxic-substances

Detailed analysis of national and European data sources show that in many professions women are exposed to several ergonomic risks at a time, which may contribute in turn to the higher prevalence of musculoskeletal disorders when compared to male workers. Different sectors show distinct patterns of exposures to the different risk factors, but all of them have in common that several risk factors are much more prevalent than on average. As an example, while HORECA workers in the hotel, restaurant and catering sector more often perform monotonous and repetitive tasks, and carry heavy loads, while also being exposed to tiring postures, their counterparts in the health care sector report complex tasks, frequent interruptions and working with computers. Both groups are highly exposed to prolonged standing and other multiple physical and organisational risk factors that may lead to musculoskeletal diseases.

In addition to the single risk factors, as demonstrated by a French study, multiple exposures to more than one risk factor related to musculoskeletal diseases are slightly more common among women than among their male counterparts (SUMER, 2003). Also while exposures decrease with age for male workers, they increase for females. The patterns of combined exposures are also distinct and characterised by repetitiveness and by ergonomically particularly strenuous postures (twisting, bending, and having to stretch out).

Other studies highlight prolonged standing and sitting combined with static work as particularly relevant for female professions and under assessed in national surveys and monitoring tools. A European study found that there was a higher proportion of women doing repetitive tasks for a longer period than men and that this may be due to the need to retain jobs in areas that suit their wider social needs. According to the Fourth European Working Conditions Survey, more female workers (48.5%) than their male counterparts (43.1%) work with computers at their workplaces. Furthermore, female workers (38.0%) use the Internet and e-mail more often at work than the opposite sex (34.5%). Women predominate in health education, the public sector, as well as in clerical occupations which can all be characterised by a greater use of IT, static postures and prolonged standing or sitting.

Complex tasks go hand in hand with the need for more training in health care and education, while monotonous tasks are combined with high speed of work and tight deadlines in the hotel, restaurant and catering sector. Common to all the service professions is that the pace is dependent on customers and frequent interruptions.

A recent EU-OSHA study found that the age of workers and the fact that cleaners are working at night or early in the morning contributed to the risk of slip and trip injuries, since their reactions and concentration levels decrease at night. A characteristic of the cleaning sector in Europe is the dominance of women, in particular mature women. But age is not the only reason for high accident rates. Cleaners have to work with and on dirty floors, wet floors, different floor coverings and changes from wet to dry areas. Moreover, cleaners can seldom influence the orderliness of a workplace. Thus, the risk of a trip caused by objects dropped on the floor is quite high. The cleaning industry also employs a high proportion of workers from ethnic minorities and many migrant workers, who may work without adequately understanding the instructions of the trainer or employer.



By courtesy of INSHT

Above all, there is a tendency to ignore health and safety elements in low paid jobs such as cleaning.

While the review provides some recent information on combined exposures in female jobs, it also highlights this as an area where more research is needed to improve prevention.



By courtesy of INSHT

Table 2: Combined risks - a major issue for women at work

Risk factors, conditions	Outcomes
Working in service sectors Jobs not covered by OSH legislation Prolonged standing and sitting Static postures Monotonous and repetitive work Moving loads repetitively and moving people Exposure to biological and chemical agents Client and patient contact Working at clients premises Multiple roles Lack of information and training Low control, autonomy and support	Stress and mental health problems Different accidents: slips, trips and falls, violence-related, needlestick injuries, cuts and sprains Fatigue and cognitive disorders Musculoskeletal disorders Infectious diseases Skin disorders, asthma

Table 3: Examples of hazards and risks found in female dominated occupations

Work area	Risk factors and health problems include:			
	Biological	Physical	Chemical	Psychosocial
Healthcare	Infectious diseases – bloodborne, respiratory, etc.	Manual handling and strenuous postures; ionising radiation	Cleaning, sterilising and disinfecting agents; drugs; anaesthetic gases	'Emotionally demanding work'; shift and night work; violence from clients and the public

Risks and trends in the safety and health of women at work

Work area	Risk factors and health problems include:			
	Biological	Physical	Chemical	Psychosocial
Nursery workers	Infectious diseases – particularly respiratory	Manual handling; strenuous postures		'Emotional work'
Cleaning	Infectious diseases; dermatitis	Manual handling, strenuous postures; slips and falls; wet hands	Cleaning agents	Unsocial hours; violence, e.g. if working in isolation or late
Food production	Infectious diseases – e.g. animal borne and from mould, spores; organic dusts	Repetitive movements – e.g. in packing jobs or slaughterhouses; knife wounds; cold temperatures; noise	Pesticide residues; sterilising agents; sensitising spices and additives	Stress associated with repetitive assembly line work
Catering and restaurant work	Dermatitis	Manual handling; repetitive chopping; cuts from knives; burns; slips and falls; heat; cleaning agents	Passive smoking; cleaning agents	Stress from hectic work, dealing with the public, violence and harassment
Textiles and clothing	Organic dusts	Noise; repetitive movements and awkward postures; needle injuries	Dyes and other chemicals, including formaldehyde in permanent presses and stain removal solvents; dust	Stress associated with repetitive assembly line work
Laundries	Infected linen – e.g. in hospitals	Manual handling and strenuous postures; heat	Dry-cleaning solvents	Stress associated with repetitive and fast pace work
Ceramics sector		Repetitive movements; manual handling	Glazes, lead, silica dust	Stress associated with repetitive assembly line work
'Light' manufacturing		Repetitive movements – e.g. in assembly work; awkward postures; manual handling	Chemicals in microelectronics	Stress associated with repetitive assembly line work
Call centres		Voice problems associated with talking; awkward postures; excessive sitting	Poor indoor air quality	Stress associated with dealing with clients, pace of work and repetitive work
Education	Infectious diseases – e.g. respiratory, measles	Prolonged standing; voice problems	Poor indoor air quality	'Emotionally demanding work', violence

Source: EU-OSHA, Gender issues in safety and health at work, pp. 12-13.

10. Disability and rehabilitation

As work ability has become a major issue in social policy, due to the ageing of the working population, and considering the fact that female workers suffer more from diseases leading to long workplace absences such as MSDs and mental health problems, this review looked at women's access to rehabilitation and back-to-work schemes and disabled women's access to work. Work ability is also an important issue as more and more older women enter the labour market and the retirement age is being revised for women in many national pension systems.

In examining workers with disability and their access to vocational rehabilitation and compensation, the data show that on average, within the EU, women and men tend to have similar rates of disability. This equality however tends to reduce when employees access rehabilitation and apply for compensation. In general, doctors are less likely to recommend rehabilitation programmes to women, which may be one of the contributing factors to women's lower participation rates in these schemes. Other contributing factors may be their age, their lower income and their caring for dependents.

The study also found that there is no clear line drawn between acquired disability and disability linked to other factors, and this was especially true for female workers. When they gain employment, women with disabilities still have barriers to overcome, such as their perception of their job, underemployment, lack of accommodations and employers' attitudes. Accommodation is a crucial aspect of women's ability to progress in their careers. One issue that affected how women overcame problems was assistance at work, but this was most influenced by whether or not the disability was visible. One study reported that a larger percentage of women with 'visible' disabilities, such as amputations, artificial limbs, the use of canes and guide dogs, were more likely to state that they received assistance than those whose disabilities were not as pronounced.

One study found that vocational rehabilitation training was biased towards industry rather than industries like service and public sector in which women work predominately. Further, the vocational rehabilitation schemes operated on the assumption that employment will be full-time so failed to take into account the working patterns that may be more suitable for women workers. This in turn led to low female participation. As so few women chose to attend there was no pressure on the centres to change their schemes to accommodate them. Another study remarked that compensation often fails to account for childcare needs whilst the rehabilitation takes place.

In Sweden, one assessment of the relationship between sickness absence and disability pension found that although more women than men were granted disability pension due to their condition, that more women were granted part-time temporary disability pension and more men permanent pension. This is despite the women having a higher rate of long-term sick leave. Those authors suggest that as men are more likely to work full-time there may be a cultural bias against giving them a partial pension. Also, they note that if women state that they are able to do housework, then they are rarely given a full-time disability pension. The need for women to consistently and constantly have to *justify* their right for compensation does not seem to have advanced far since the 1950s and 1960s the difficulties that women encountered when seeking compensation for injuries and illnesses incurred while engaged in their jobs were first highlighted.

It can be concluded that there needs to be a higher take-up by women of these schemes as women with disabilities, whether acquired at work or not, are limited in their choice of occupation, and may engage in jobs that are repetitive, and could be more hazardous as the workstations, machinery and equipment that they use, are often designed for men.

EU-OSHA's research on young workers also found that access for young workers to rehabilitation schemes was very limited. This should also be considered for young women, particularly as research also shows that they display high levels of MSDs and levels of disease in young people were found to be increasing in Member States where data were thoroughly analysed.

11. Conclusions for policy, research and prevention

A large proportion of women work in jobs that are safe, that provide training and promotion opportunities. However, many do not and it is important that these concerns are put on the agenda for policy makers and researchers.

With more and more women work under non-standard working conditions, other issues that need to be addressed by research, legislation and prevention are:

- How to reach women, who work weekends, part-time, shifts?
- How to cover them in workplace inspections by inspectors or OSH professionals?
- How to assess their exposure?
- How to ensure their representation as workers?
- How to ensure the OSH of women who work in personal services, at the premises/homes of their employers?
- How to ensure the OSH of women who work for several employers?

It is important for women that risk assessments take account of psychosocial risks as well as physical risks. This is due to the fact that most women work in 'education', 'health care' 'retail' and 'hotel restaurant and catering' sectors, which entails having face-to-face contact with customers and clients, more so than men. In addition, women still do most of the childcare and the housework.

It must be remembered that women, as much as men, are not one unit of employees, they are a diverse labour force and the needs of the different age groups and different cultures, within this body of workers, may be different. As such a more targeted gender-sensitive approach to research and prevention is needed.

As outlined over the years, more information, and thereby research, is required to explore the links between women's reproductive health and the conditions under which they work. This is still not a priority within policy or research agendas and these needs to change. Further, women have a high rate of developing certain cancers, such as breast, colorectal and endometrial, which have been linked to environmental factors and working conditions and more research is needed to further explore these connections.

Other broader issues

Work-life balance has been researched consistently over the last twenty years or so and the evidence shows that the ability to balance work and home remains problematic for women and impacts on their psychological well-being, even more so than men. Women generally tend to be seen as the 'carers' within the social system and so assume responsibility for the home and for children and parents. They therefore have more responsibilities and work longer hours than men, when the demands of work and home are combined. Even in countries with 'women-worker' family friendly policies, women experience stress more often than men and are discriminated against, with respect to work-related compensation due to a disability, because of their ability to do housework.

Like part-time work, some women choose to work on a shift system, again often to deal with child and elder care obligations. Migrant women and those who work 'informally' are likely to engage in these work patterns as well. These types of work patterns, while not gender specific, make women more vulnerable to work risks and hazards. It is important that OSH risks are analysed by gender, sector as well as occupations.

Implications for practice and research

This review examines many aspects of women at work and their OSH concerns. However, there are gaps in the research, that need to be addressed, and there are policies that are promoted from a 'worker' perspective, that is more beneficial to the male employee rather than the female employee. As this review shows, more research is needed in such areas as **non-standard working conditions, domestic workers within multiple households or multiple offices, ageing workers in the health sector, the increasing rate of work intensity, assessing risks for female workers, multiple exposures, women specific research on rehabilitation and re-insertion into work** and in **informal work**. These growing, but under-researched areas, should provide information that will outline to a greater degree the issues that impact on women's OSH. It is important to fit the worker to the job, rather than the job to the worker, especially when the worker can be seen from different

perspectives, e.g. female, young, migrant or has a disability. Overall, OSH needs to reflect the specific needs of the employee.

Table 4: How employment trends and combined exposures may impact on women’s OSH

Trends	OSH implications
Employment trends	
<ul style="list-style-type: none"> ➤ Women more and more concentrated in part-time and casual jobs, particularly in the retail trade and consumer services sector; impacts on their salaries and their career perspectives ➤ Informal work and jobs in home care and as cleaners on the increase, especially for migrant women ➤ Move towards mini-jobs, not covered by labour law ➤ Women continue to trail men in terms of career advancement and in levels of compensation and gaining higher status 	<ul style="list-style-type: none"> ➤ Stress & related health problems, fatigue and cognitive health problems ➤ Repetitive strain injuries caused by repetitive and monotonous work ➤ Low job control and autonomy, feelings of low self-esteem, low motivation, and job dissatisfaction for women ➤ OSH difficult to organise for women who work at their clients premises, how to enforce, how to assess risks, how to ensure labour protection ➤ Less access to (OSH) training, consultation, less representation in decision-making that may influence their working conditions
Occupational segregation	
<ul style="list-style-type: none"> ➤ Women still work mainly in services, while men work mainly in construction, utilities, transport and manufacturing ➤ Increases in activity highest for women aged 55-64 ➤ Older women work more in education, health and social work and public administration ➤ Employment in manufacturing decreasing ➤ Female workforce is ageing in some sectors – manufacturing, agriculture ➤ Women highly represented in informal work, home and domestic services 	<ul style="list-style-type: none"> ➤ Different risks for men and women – prolonged sitting and standing, static work significant for women ➤ More client contact – more harassment and violence ➤ Different risks for different age groups – prevention should be tailored ➤ Occupational accident rates stagnating in some sectors, not recorded for education, health care and sectors with high rates of informal work, e.g. agriculture ➤ Older women exposed to heavy work ➤ Less access to training for older women, less access to consultation, representation and preventive services in the informal sector
Work organisation and working time	
<ul style="list-style-type: none"> ➤ When both paid and unpaid work (domestic) are considered, women have the longest total working week, especially if they work full-time ➤ Trend to irregular working times, especially in the informal sector, when working at client’s premises, and in restauration 	<ul style="list-style-type: none"> ➤ Stress ➤ Circulatory disorders ➤ Reproductive problems ➤ Musculoskeletal disorders ➤ Less access to preventive services, consultation, representation

Trends	OSH implications
<ul style="list-style-type: none"> ➤ Shift and weekend work in HORECA, retail and health care concern women at all ages ➤ Less autonomy at work 	<ul style="list-style-type: none"> ➤ Difficulties to assess what is work-related and implement changes ➤ Labour law does not apply to mini-jobs, enforcement difficult ➤ Difficulties to enforce OSH for multiple jobs and constantly changing jobs ➤ Exposures difficult to assess for multiple jobs, difficulties to monitor and record risks and health effects
Younger women	
<ul style="list-style-type: none"> ➤ Unemployment gap between young men and women has clearly diminished; in some countries unemployment of young men has even become slightly higher. ➤ Younger women work more in retail and HORECA ➤ Younger women work more in low-qualified jobs and on temporary contracts ➤ Gender pay gap already at the start of career ➤ Employment gap particularly high for mothers aged 15 - 24 with very young and with children in school age 	<ul style="list-style-type: none"> ➤ Different risks and trends for different age groups – prevention should be tailored ➤ Lack of experience and training of young women ➤ Younger women exposed to sexual harassment ➤ High exposure to violence, due to client contact ➤ Occupational accidents even increasing in some countries in female-dominated sectors, such as HORECA ➤ Less access to consultation, preventive services, representation at enterprise level ➤ Young mothers a particularly vulnerable group

Policy recommendations

The European Commission's current five-year Strategy for Safety and Health at Work 2007-2012¹⁸ will be revised in 2011. As the Parliament noted in its Resolution on the strategy in January 2008 "it is worrying that the reduction in the number of occupation accidents and diseases has not been spread as certain categories of workers (e.g. migrants, workers with precarious contracts, women, younger and older workers)".

The Strategy set a target to reduce the rate of incidence of accidents at work by 25% for the EU-27, through support for the full and effective implementation of EU legislation. The Strategy also called for the development of national strategies, to encourage and support approaches that are focused on health in the workplace, and to identify new potential risks. However, there are clear indications that accident rates are stagnating or even increasing in some sectors with a high proportion of women, such as the hospitality sector or retail.

Specific actions in relation to OSH are also included in the Commission Staff Working Document on Actions to implement the Strategy for Equality between Women and Men 2010-2015¹⁹, to include measures to:

¹⁸ Improving quality and productivity at work: Community strategy 2007-2012 on health and safety at work

¹⁹ Commission Staff Working Document (2010) Actions to implement the Strategy for Equality between Women and Men 2010-2015 Accompanying the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Strategy for Equality between Women and Men 2010-2015, {COM(2010) 491}

- Promote health and gender impact assessment of policies and programmes.
- Take due account of gender aspects in the forthcoming EU Strategy on Health and Safety at Work (2013-2020).
- Take account of the gender aspects in the legislative work on ergonomics and work-related musculoskeletal disorders (WRMSDs) as well as in the preparatory work for a possible review of Directive 2004/37/EC.
- Take account of the gender aspects in the preparatory work for a possible review of Directive 2004/37/EC on carcinogens and mutagens.

Other recommendations

- To assess the need for gender-specific safety and health legislation and monitoring, as sectors traditionally deemed as 'low-risk' i.e. those involving education and office-related jobs are now seen as more dangerous, for example regarding harassment and stress. What can be concluded is that not only regarding physical risks, but also regarding organisational risks, the definite conditions of work need to be considered when risk assessment is carried out. Avoiding assumptions is key to setting the appropriate prevention measures and providing the many female workers in these sectors with appropriate training and support.
- Improving the identification of risks and exposures will be important to 'make the invisible visible', as are improved data documenting these risks and exposures, and the related health effects, and a wider range of indicators and more differentiated monitoring instruments to reflect the tasks, occupations and risks specifically faced by women.
- Ensure women's participation in policy discussions and when laying out legislation. It will be important to ensure that women participate in the development of OSH strategies and policies and their implementation in the workplace. For example, it will be important to ensure that more women elect directly and take roles as workplace safety and health representatives, and that the social partners play a key role in driving gender mainstreaming in OSH.
- Member States should be encouraged to actively implement gender mainstreaming in OSH and include the gender and diversity element in their national OSH strategies.
- As highlighted before by EU-OSHA, EU Member States, when transposing Directives, should ensure that gender is dealt with in a systematic and comprehensive fashion. This is especially important as more women are moving into occupations that were traditionally dominated by men, such as construction, and their OSH needs may differ.
- A broader and more holistic approach to OSH would also enable a shift away from an exclusive emphasis on accidents, to a more comprehensive approach that takes into account psycho-social factors, work autonomy and work-life balance, in amongst other areas.
- Trends in working conditions, such as the move away from industrial workplaces to services, increasing mobility, use of new technologies, intensification and increasing precarisation of work need to be assessed for their specific effect on women and their OSH. The adaptation of research and monitoring tools needs to take account of them too.
- Due to the prevailing occupational segregation, there are different patterns of occupational disease and illness between men and women. As the standards still reflect male characteristics that do not take account of the physical and physiological differences of women, the current taxonomy still does not sufficiently reflect women's exposures and health problems at work. Although comprehensive studies have been conducted in the area of occupational exposures to women at work, researchers have highlighted the need for further exploration related to occupational exposures and women.
- Adapt labour inspection practice to the increasing number of women in the labour market, the observed shift from industry to services, and the changes in contractual arrangements. A gendered approach to interventions is warranted: resources should be assessed for the contribution they make for an increasingly female workforce, and for how they are adapted to the specific needs in these diverse service sectors. Design OSH prevention resources to address these changes.

- The differences between countries are enormous; this is why the situation should be assessed in a differentiated way, and by country. National OSH strategies that integrate developments which impact on the employment situation of women, such as education and vocational training, health provision, care facilities and employment strategies, could help tailor the actions at the national level and make them more effective. Furthermore, monitoring the gender impact of rapid changes in the newer Member States in order to avoid the risk of wider gender inequality.
- Explore the differences between Member States policies and identify what the success factors are for an effective integration of women in the labour market, while at the same time taking account their OSH situation.
- Some of the ways that have been proposed to make jobs safer include increasing and improving training to employees, especially those who work part-time. For example, training and OSH education could be scheduled at those times when part-timers or employees with flexible work time are able to participate. For those older women entering the labour market after years of vocational inactivity, re-training would be beneficial. Flexible working conditions would benefit women with work-family conflicts, such as child and elder care responsibilities.
- Female workers on mission or workers who have to work at their clients' or patients' premises may not be covered by the usual OSH structures, such as OSH preventive services and inspections by authorities. These workers may be more vulnerable and dependent on their clients, while at the same time having limited scope for adapting their working conditions. They may also work for several employers and in several jobs. Policy, research and prevention should address the risks that female workers on farms, in homes (home care, cleaners, child care), driving vehicles for work, or at clients premises may incur. Clients of such services should be included in the target groups for OSH information and campaigning for prevention in these sectors as should the organisers of such services.

Monitoring and statistics:

- Monitoring tools at the European level need to be critically assessed on how they take into account confounding factors and wider issues: For the European accidents statistics, it was found that the difference between women and men was smaller when incidence rates were calculated on a full-time equivalent basis, because women worked part-time more often than men and were therefore less time exposed to the risk of accidents. If the incidence rates were additionally standardised for the different occupations in which women and men work, the incidence rates were nearly equal for some countries. Unfortunately, these standardised data are not available from Eurostat for other years.
- All EU countries should be encouraged to have well-developed National Working Conditions Surveys, which are critically reviewed as regards gender and diversity aspects, in order to obtain information that is standard across countries and provides rich information.
- This may also support attempts to explore multiple exposures and design a more holistic approach to OSH research, prevention and practice.

Violence at work:

- Measures to target violence and harassment at work should be targeted to the specific needs of the sector and group considered. EU-OSHA has produced some multilingual guidance for some of the sectors (education, health care, hospitality).
- Efficient reporting systems for violence at work should be put in place to address underreporting. These systems need to be linked with quick measures for action, whether to provide immediate support to workers in case of an event or counselling after the event.
- Generally, a holistic approach to OSH should be taken which identifies and takes into consideration work-life balance, harassment and discrimination. In order to strengthen the awareness of the need of such an approach, stakeholders should discuss OSH activities with regard to female workers.

Accidents and health effects

- Accident rates of female workers are not decreasing as much as they are for male workers. A lot is known about accidents of male workers according to age groups and in the different sectors, but this is not the case for female workers. To target accident prevention, more information should be gathered about the type of accidents of women suffer in different occupations and sectors. Factors such as age, self-employment, sector and occupation, and migration background should be taken into account, as should multiple employments. Part-time work and lacking access to preventive services could be contributing factors too.
- Women and men engage in different behaviours even when working in the same sector and within the same types of jobs. Women working on some jobs, such as taxi drivers, have significantly lower accident rates. This should be explored to help improve prevention.
- Static work, prolonged standing and sitting, risk factors particularly relevant to female service occupations, are not currently monitored and assessed in many workers surveys and the related health effects are under researched. This is why a recent EU-OSHA report recommended to include them in workers surveys and explore the occurrence of lower limb disorders. Regarding age, the study demonstrated that MSD rates of young workers were increasing in some Member States. These trends should be followed up for young women and prevention measures tailored to reduce their MSD risk.
- Women are more susceptible to depression and anxiety than men, and their lower mental health may be linked to the multiple roles they perform on a daily basis. These data should be assessed in the context of cardiovascular diseases as the leading cause of death in EU countries.
- Exposures to dangerous substances in service occupations are frequent, but remain underassessed. Women's exposure in health care, hospitality, dry cleaning, hairdressing and waste management may also involve carcinogens. Exposures in these occupations, but also in other tasks such as cleaning may be varied and are often unpredictable. This is why it is crucial to avoid assumptions about what women are exposed to and to apply the same principles of risk assessment, substitution and elimination, and the hierarchy of prevention measures as defined in EU prevention approach as for other workers. Gender differences in uptake and metabolism of dangerous substances should also be further explored.
- Research needs to address occupational diseases affecting women, in particular occupational cancer: A detailed analysis of national data shows that diseases of female workers are significantly less often notified and when they are notified, recognition rates are much lower. Many diseases are not assessed for their occupational component. The link between occupational exposure and disease is also much less explored for female workers, leading to omission of risk factors relevant for women from the overall assessment.
- A broader view on reproductive health is needed: As raised in 2003 by EU-OSHA, and as the 'lack' of research continues to highlight, reproductive issues in respect of overall working conditions needs to be better focus in the research agenda. And more importantly, while there is some research on pregnant women and new mothers, there is far less research on other women's life experiences, such as hormonal effects, menstruation disorders and menopause.
- Also, in 2003 the point was made that research in respect of cancer mainly involved men, and this situation has not changed, as shown in this present review over the medium-term, although efforts have been made in some areas, for example regarding breast cancer.
- Recognition of night work as a contributing factor to the development of breast cancer in female workers has broken the ground for the recognition of work organisational causes in the development of occupational cancer. This could pave the way for an entirely new approach to occupational cancer, taking in account so-called "soft" risks, in addition to the known "hard" risks. Equally such approaches could help pave the way for a better exploration of occupational risks to both men and women in emerging service occupations and a more holistic approach to OSH research and prevention.
- WHO research recommended that specific gender focussed research needed to be undertaken in occupational health policies and programmes, to improve training, capacity and the delivery of occupational health services.

Rehabilitation and reintegration:

- Due to the nature of women within the work force, policy makers and labour organisations should be aware that women with disabilities are at risk of double or multiple discriminations and therefore require special attention, and policies with a focus on gender policies should be aware of this issue in order to reinforce guidelines for disability mainstreaming especially as women with disabilities are discriminated against more than men with disabilities.
- Employers should be encouraged to have flexible and effective rehabilitation into work policies, so employees who are only able to work a percentage of the normal hours, are retained in the workforce. This is becoming more of an issue as the working population in Europe is ageing. The female workers need to be explicitly addressed: rehabilitation measures should also be targeted at temporary workers and part-timers, who are often women, young or migrant workers.
- Rehabilitation and back-to-work policies should also address the pattern of work-related health problems specific to women leading to longer workplace absences and critical for reintegration: the occurrence and distribution of MSDs and the higher prevalence of mental health disorders.
- Those responsible for implementing systems need to consider gender issues, and in particular the home life of women and how this affects their rehabilitation. Rehabilitation costs need to include both direct and indirect costs.
- There needs to be more research for women on vocational retraining, rehabilitation and re-insertion into work.

Vulnerable groups of female workers

- Some groups of women, such as young women or young mothers, may be particularly affected by the financial crisis, and it would be worth keeping track how this impacts on their health and safety at work. In some sectors where they preferably work, such as the hospitality sector, accident rates increase or stagnate. As demonstrated in previous EU-OSHA research, young workers in these sectors may also be more vulnerable and the employment conditions (e.g. difficulties to enter the labour market, temporary short term contracts) may make them accept worse conditions of work.
- Older women are more likely to enter the workforce, and are a much needed group due to the overall ageing population across Europe. In this respect any research and preventative measures that could be done to ensure a more productive working environment should be explored.
- More research is needed to assess the prevalence and gender aspects of the phenomenon of undeclared work in European Union.
- A comprehensive analysis is needed in respect of working conditions to confirm if there are significant gender differences between formal and informal economy.
- Information on migrant workers' OSH can be a source to identify data about undeclared workers, and about gender issues related to work. More research should be made linking migrant women workers with undeclared work.
- It may be beneficial to develop synergies with organisations who provide support to informal workers, for example to run NGO defined OSH training for workers in this sector to ensure that they are better able to deal with some of the risks and hazards they may encounter in these jobs, as these workers are difficult to reach.



By courtesy of INSHT

12. Gender mainstreaming and OSH – examples of successful implementation

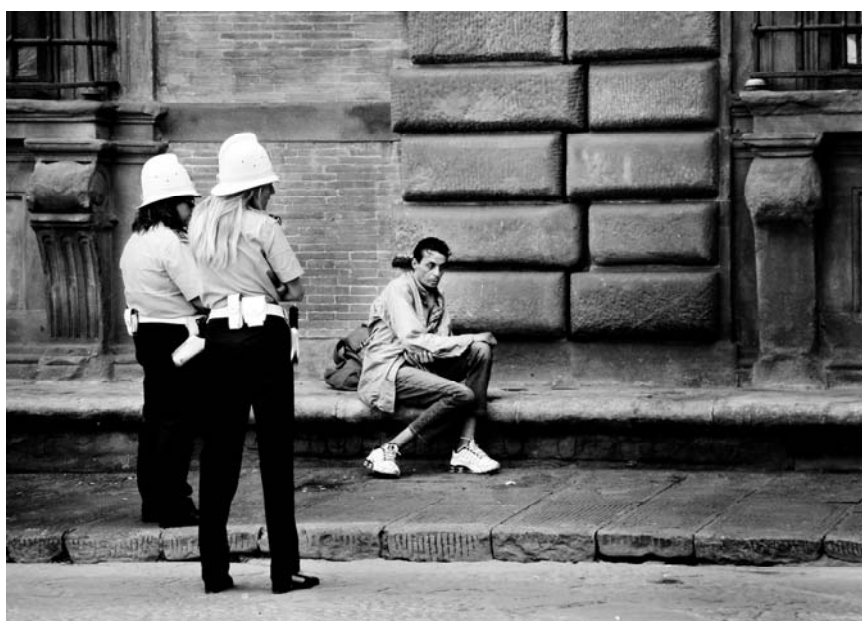
Information is particularly scarce on official policies aiming to target the specific conditions of women at work, incl. effective mainstreaming of gender aspects for example into OSH legislation and inspection practice, taking a gender-sensitive approach. For the purpose of this report, EU-OSHA has collected information on examples from the Members States, in particular:

- OSH legislation specific to women at work and regarding OSH issues, which is additional to pregnant women and breastfeeding mothers provisions implementing the Directive
- Results of targeted inspection campaigns
- Guidance, for example on OSH and diversity issues addressing gender
- Gender-specific studies on risk factors, such as :
 - Exposure to violence and harassment
 - exposures to biological and chemical agents, including exposures to infectious agents, ergonomic risks, climatic risks
 - gender differences in accident risks and causes and circumstances of workplace accidents
 - Work organisational issues (unusual working time, shift work, lone work, etc.)
 - Use of personal protective or other equipment or work in “male” sectors
- Information on health outcomes:
 - Specific health problems identified for example in surveys, targeted research or inspections
 - Specific recognised occupational diseases
- Issues related to specific groups (lone workers, migrant workers, young or older female workers, etc.)
- Inclusion of gender issues in research programmes

- Programmes about how to make labour inspectors “gender-aware” or incorporate gender issues in their work
- Programmes about how OSH authorities incorporate gender issues in their work
- How work programmes are assessed for gender balance (e.g. ensuring hospitals, hotels, restaurants and catering receive attention as well as construction, gender budgeting)

Some of the examples were included throughout this report and in a dedicated chapter at the end of this report. A more detailed study of such good practice examples is currently being prepared by EU-OSHA and will be published in 2012.

A successful example of a national strategy demonstrated the benefits of including gender aspects into labour inspection activities and strategic work planning: covering all sectors, protecting women as well as men, dedicating resources more equally to all workers, and addressing emerging risks, such as MSDs and stress related problems that are a challenge to OSH policy.



Ruben Buhagiar - EU-OSHA photo competition 2009

Table 5: Women and health at work – examples of gender-sensitive studies and policies included in this report

Country	Programme	Issue
Europe	NEXT	Exploring violence and premature departure from their profession for nurses in 10 Member States
Europe	ETUCE Second Survey on Cyber Harassment of Teachers	Survey explored national teacher unions' actions and strategies To gather good practices to revise the ETUCE Action Plan on Violence and Harassment in Schools and include cyber-harassment.
Austria Austrian labour inspection	Gender mainstreaming policy of the Austrian labour inspection.	Gendered OSH strategy Policy for labour inspection activities, training to labour inspectors

Risks and trends in the safety and health of women at work

Country	Programme	Issue
		<p>Guidance documents related to gender aspects in OSH, gender-sensitive workplace inspection</p> <p>Guidance for specific activities and emerging sectors/occupations, such as home care</p>
Austria	Gender mainstreaming and noise exposure in orchestras	<p>Risk assessment for female orchestra musicians</p> <p>Designing specific prevention measures (seating arrangements, hearing protection, screens, organisational measures)</p>
Austria	Targeted campaign in nursing homes	OSH in old people's homes and care, gender sensitive sectoral inspection and awareness-raising initiative to assess and improve the OSH situation of mainly female workers in the sector
Finland	The WORK programme focuses on women at work especially with regard to the continuing increase in atypical employment contracts in Finland. In particular, two projects are funded by the Academy of Finland '	<p><i>Gender Inequalities, Emotional and Aesthetic Labor and Well-being in Work'</i></p> <p>Mapping the practices of gender in working life more generally through qualitative case studies</p> <p>Analysing the practices of recruitment processes</p> <p>Practices of customer service in call centres and in women's small firms</p> <hr/> <p><i>Impact of Lifestyle Modification on Pregnant Women's Work ability, Sickness Absence and Return to Employment'</i></p> <p>To decrease sickness absence,</p> <p>To increase work ability and return back to work after maternal/parental leave</p>
Finland	FIOH projects on women worker cancer survivors	<p>Cancer survivors' employment</p> <p>Cancer survivors' work ability</p> <p>Cancer survivors' received and needed social support from their work place and the occupational health services</p> <p>Cancer survivors' work engagement</p>
Finland	Equality and Multiculturalism at the Workplace	<p>Population Research Institute's project <i>Equality and Multiculturalism at the Workplace</i></p> <p>Promote the participation in working life of women with an immigrant background. Target groups were workplaces recruiting immigrants and their personnel.</p> <p>The study showed the deep differences between the integration strategies of women from different socio-economic backgrounds:</p> <p>Showed the importance of personal networks and supportive colleagues to attain success at work.</p>

Risks and trends in the safety and health of women at work

Country	Programme	Issue
Finland	Finnish Institute of Occupational Health, FIOH	<p>The Ministry has set a number of detailed strategic targets for FIOH. One such strategic goal is titled Promoting gender equality and diversity at work. The aim has been to increase gender equality in Finnish working life by producing new scientific knowledge and by developing tools and practical methods for HR managers and OSH professionals.</p> <p>The "Work/life balance" research and action programme was launched (2005-2009) to support balance between work, family and other spheres of life. The MONIKKO project emphasised the importance of equality from a wider perspective taking into account age, ethnicity, and family situation.</p> <p>The Institute has drafted a Gender Equality Plan which was prepared in close cooperation with the staff members.</p>
France	Gender analysis of the SUMER survey (expert survey conducted by OSH professionals among workers)	Gender dimension of workplace exposures and complaints, synthesised view of workplace exposures, based on national monitoring sources
Spain Región of Castilla-León	Guide for the prevention of OSH risks with a gender focus.	<p>Description of the situation of women at work</p> <p>Overview over relevant OSH and equalities legislation and programmes of relevant institutions</p> <p>Recommendations to protect women's health at work, incl. worklife balance, gender mainstreaming into OSH and protection of pregnant and breastfeeding women</p>
Spain INSHT	Gender-sensitive guide to evaluation of physical loads	Guide addressing MSDs and risk factors from a gender-differentiating perspective. Provides monitoring methods, checklists and questionnaires regarding fatigue, physical workload (ergonomic assessment) and background guidance, incl. practical examples
Spain	Dulcinea - EQUAL Project	Training women for coordinating posts in construction
Spain	Gender Equality Observatory (Observatorio de la Mujer)	The Observatory prepares studies on gender impact in the military work ambit.
The Netherlands	<p>Taskforce DeeltijdPlus (Part-time Plus)</p> <p>Dutch social partners and government (Ministry of Social Affairs and Employment) and local authorities</p>	27 pilots to investigate barriers and opportunities to make the labour market more flexible for women. The objective of the taskforce is to stimulate women in the Netherlands who have part-time jobs less than 24 hours a week to work more hours.
United Kingdom	Single Equality Scheme for the Health and Safety Executive 2010 – 2013	Identify sectors where women and/or men are particularly at risk and ensure that example risk assessments for these areas include gender occupational health and safety issues.

Risks and trends in the safety and health of women at work

Country	Programme	Issue
		<p>To promote gender specific messages about risks to health in the workplace on the website.</p> <p>Address issues in relation to correct face-fit of RPE, particularly in relation to female face size/shape.</p> <p>Research into the reported association of shift work and breast cancer and other major diseases.</p> <p>Agriculture and food sector scoping study on respiratory disease in the bakery industry to include diversity issues of gender, age and race.</p> <p>Research the risk of mesothelioma in females as well as males.</p> <p>Continuation of research to estimate the occupational cancer burden in the UK, including breast and prostate cancer.</p> <p>Encourage more involvement of women in health and safety decision-making.</p>