International Labour Office
Geneva

Working paper

10 Keys for Gender Sensitive OSH Practice – Guidelines for Gender Mainstreaming in Occupational Safety and Health

SafeWork

Programme on Safety and Health at Work and the Environment (SafeWork)

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First published 2013

ISBN 978-92-2-127068-3 (print)
ISBN 978-92-2-127069-0 (web)

Photocomposed in Switzerland JMB
Printed by the International Labour Office, Switzerland

SafeWork/SIDA project

This report was produced under the Swedish International Development Cooperation Agency (SIDA) project "*Linking safety and health at work to sustainable economic development: From theory and platitudes to conviction and action" (2009–2012)*. The project promotes the improvement of occupational safety and health for all workers through the development of global products addressing the methodological and informational gaps in this field, and through the mobilization of national stakeholders towards the implementation of practical measures at national, local and enterprise levels. The outputs of the project include training materials, practical tools and policy guidance to reinforce national and local capacities in occupational safety and health, and to help constituents design and implement occupational safety and health policies and programmes.

Preface

Recognising diversity, including gender differences, in the workforce is vital in ensuring the safety and health of both men and women workers. Whilst some progress has been made in this area, the International Labour Organization believes more can and should be done. Gender differences should be considered in the development of occupational safety and health (OSH) policies and prevention strategies. This approach acknowledges and makes visible the differences that exist between men and women workers in order to identify OSH risks and implement effective solutions.

In taking a gender sensitive approach, one recognizes that because of the different jobs women and men do and the different societal roles, expectations and responsibilities they have, women and men may be exposed to different physical and psychological risks at the workplace, thus requiring differing control measures. This approach also improves the understanding that the sexual division of labour, biological differences, employment patterns, social roles and social structures all contribute to gender-specific patterns of occupational hazards and risks. This needs to be taken into account if OSH policies and prevention strategies are to be effective.

This working paper is targeted at an audience of national governments, health and safety authorities, employers' and workers' organizations and has identified ten guidelines to support gender mainstreaming in OSH. Each guideline highlights an area where action could be undertaken to improve the safety and health of both men and women workers.

The development of these guidelines would not have been possible without the financial contribution from the Swedish International Development Cooperation Agency. We would also like to acknowledge Ms Andrea Oates, consultant, for her contribution to the background paper. Our appreciation goes to ILO colleagues Ms Valentina Forastieri, Senior Specialist for Occupational Safety and Health for technical contribution and shaping the final guide, Mr Andrew Christian Technical Specialist on Occupational Safety and Health for reviewing and editing the report, Mr Ned Lawton, from the ILO Bureau for Gender Equality for his comments and Ms Amélie Schmitt, Chief Technical Adviser of the SIDA-funded project under which the guide was produced.

I hope that this publication will serve as a useful source of information and guidance to assist all parties who have a role in mainstreaming gender into OSH policy and practice thus developing more effective preventive and protective strategies for all workers.

Seiji Machida
Director
Programme on Safety and Health
at Work and the Environment (SafeWork)

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Introduction

1.1. The purpose of the guidelines

The safety and health of all workers, women, men, young, old, migrants or persons with disabilities is of paramount importance to all. These International Labour Organization (ILO) guidelines, Gender Mainstreaming in Occupational Safety and Health (OSH), aim to assist both policy-makers and practitioners by taking a gender-sensitive approach and mainstreaming gender into OSH policy and practice with the ultimate goal of reducing occupational accidents and diseases for both men and women workers.

The guidelines explain how to integrate gender issues into the analyses, formulation and monitoring of policies, programmes and preventive measures in order to reduce inequalities between men and women in OSH. They include advice in the areas of information gathering, standard setting, legislation, policy making and preventive strategies; they set out the need to:

- carefully explore the effects of gender roles on safety and health;
- analyse risks in both male and female dominated occupations;
- develop sex-disaggregated OSH data;
- incorporate the findings from OSH research into policy making and workplace action; and
- fully involve both men and women workers in the decisions that affect their safety and health at all levels, from bodies such as national safety councils to occupational health services and workplace-level safety committees.

The purpose of these guidelines is to mainstream gender issues in OSH thereby giving the same priority to women's as to men's OSH, by taking into account the specific gender realities of women and men in the design of policies on OSH. The ILO's strong commitment to integrating gender concerns into the overall OSH policy development process is reflected in this approach.

1.2. Why mainstream gender into occupational safety and health?

The aim of gender mainstreaming is to assess the implications for women and men of any planned action, legislation, policy or programme, its implementation, monitoring and evaluation. It also implies integrating gender issues into all aspects and at all levels of an institution or organization's objectives, activities, systems, structures and resources allocation (human and financial).

While the concept of gender mainstreaming into OSH has gained some ground, there are only isolated examples of gender being mainstreamed into OSH legislation and policy and workplace action. When reference is made to gender and health, it is usually understood to be primarily concerned with women's reproductive health. Indeed it is a general phenomenon in all fields that when gender issues are discussed, they generally deal with women and not with men.

The gender division of labour, employment patterns, social roles, social structures and biological differences can contribute to gender-specific patterns of occupational hazards and risks. Women now constitute over half a billion paid workers, equivalent to 40 per cent of the global workforce and 43 per cent of the agricultural workforce.[1] Recognition of the gender division of labour in the modern workforce is essential in promoting safer workplaces and healthier outcomes for all workers.

1.3. Men and women are exposed to different hazards and risks at work

As the labour market remains heavily segregated, women and men still do different work. Women and men may be exposed to different physical and psychological hazards and risks at the workplace. In addition, exposure to the same risks may also impact women and men differently. Work predominantly undertaken by women is often presumed to be lighter, easier and safer than that undertaken by men, and consequently receives less attention. The safety and health risks associated with work dominated by male employees are generally better known and many preventive measures have been identified. Nevertheless, to ensure continued improvement in workplace safety and health for both men and women, gender differences must be taken into account in the design of OSH legislation, policies, systems and preventive measures.

To address gender disparities in OSH, gender integration should respond to the specific hazards and risks, working conditions and requirements, benefiting both and not adversely affecting either men or women in the implementation of protective and preventive measures. This means neither being gender biased nor being gender-blind (not taking gender into account) in the design of legislation, policies and OSH practice.

[1] World development report 2012: Gender equality and development. World Bank.

Guideline 1

Taking a gender mainstreaming approach to reviewing and developing occupational safety and health legislation

WHY

OSH legislation

Traditionally men are more likely than women to work in hazardous industries such as mining, forestry, fishing and construction. In light of the above, men are more likely than women to be exposed to risks that, if not adequately controlled, can result in serious or fatal accidents. As a consequence, OSH laws have traditionally focussed on visibly dangerous work largely carried out by men; while the focus in the case of women (especially pregnant women) has been on protective laws prohibiting certain types of hazardous work and exposures, such as working in mines, at night, with lead or ionizing radiations or carrying heavy loads. Work undertaken by women is generally regarded as safe, because it is less hazardous, and women's occupational injuries as well as illnesses such as work-related stress, musculoskeletal disorders (MSD) or dermatitis have been under-diagnosed, under-reported and under-compensated compared with men's. On the opposite side, men's reproductive health hazards have been considered less relevant in the context of OSH legislation.

With the introduction of equality legislation in industrialised countries, protective regulations which were considered as a restriction to women's opportunities for participation in paid employment have been removed, and modern laws to protect workers' health and safety aimed at being "gender neutral" (being neither advantageous or disadvantageous to either sex) were enacted. However, two considerations need to be made: 1) In developing countries the restriction to women's night work and other hazardous sectors such as mining still provide for women protection from extreme working conditions and violence. 2) Gender-blind legislation may overlook gender differences in exposure to hazards and risks. Most OSH legislation throughout the world still hides gender differences instead of assessing risks with a gender perspective and managing preventive measures taking into account the needs of both sexes. This gender-neutral legislation is often based on the assumption that it will equally apply to all workers as it does not explicitly recognize gender differences and therefore may not ensure equity in protecting men and women workers.

Legislation on violence and harassment

Many studies show that women are at particular risk of physical and psychological violence, both in and outside the workplace. Women are concentrated in many of the occupations with a high-risk of violence; working in contact with the public and in solitary settings, particularly

as teachers, social workers, health-care workers, and as clerks in banks and shops. Women also tend to work in low-paid and low status jobs where violence is more common; while men predominate in better-paid, higher status jobs and supervisory positions. Men tend to be at greater risk of physical assault, while women are particularly vulnerable to incidents of a sexual nature.

Globally, psychological violence at work and especially bullying, mobbing and harassment are reported to be a major concern. In response to the changing workplace and the increase of psychosocial hazards and risks, many countries are increasingly regulating workplace bullying, violence, discrimination, and harassment (including sexual harassment) by introducing new legislation or incorporating new provisions in existing legislation to specifically address these risks. Other countries have opted for non-regulatory instruments, such as codes of practice and provisions in collective agreements. Several court rulings in different countries have recognized psychological violence as an occupational risk, equal in importance to other hazards in the work environment.

HOW:

National authorities should take a gender-sensitive approach in developing and reviewing OSH legislation to ensure that:

- Legislation pays attention to the biological differences between men and women to ensure they are equally protected.
- There is full legislative coverage of the sectors and occupations where women and men work.
- OSH legislation is not restricted to protecting workers in visibly dangerous jobs associated with high levels of accidents and injuries; but more attention is paid to all sectors and occupations, and in particular, those where women predominate.
- OSH legislation requires employers to implement risk management, preventive and protective measures ensuring gender differences are addressed.
- OSH legislation takes into account existing legislation concerning the prevention of violence and harassment at work.
- OSH legislation takes into account the interaction between work and home and ensures that workers can have a reasonable work-life balance. Where relevant, such legislation should take into account and refer to other relevant legislation on workers with family responsibilities.

Finland

Finland has introduced OSH legislation covering reproductive hazards for both men and women. The Occupational Safety and Health Act (738/2002) require a risk assessment to take account of "the potential risks to reproductive health" and to reduce exposure to hazardous chemicals, physical agents and biological agents so that "no risk is caused to the employees' safety or health or reproductive health". The risk assessment must also take account of "age, gender, occupational skills and other personal capacities".

EU-OSHA, 2003

Including domestic servants in OSH legislation in Australia and South Africa

One area of employment carried out mainly by women, but often completely absent from OSH legislation coverage, is that of domestic service.

The Australian government made changes to its employment and compensation legislation to include domestic servants. In 1998, domestic workers became covered under the Australian workers' compensation scheme and in 2002 sections of the Labour Act were amended to include domestic servants through the Labour Act (Chapter 93), "Labour (domestic servants) rules".

EU-OSHA, 2003

South Africa has also legislated in this area in the Sectoral Determination 7 of the Basic Conditions of Employment Act stipulates limits on the working time of domestic servants. The South African Department of Labour developed a Basic Guide to Working Hours (Domestic Workers), that sets out that domestic workers may agree, in writing, to work up to 12 hours a day without getting overtime pay; but they may not work more than 45 ordinary hours a week, 10 hours' overtime a week, five days a week. They are entitled to receive double pay if they work on Sundays or public holidays.

African Newsletter on OSH, 2008

Guideline 2
Developing OSH policies to address gender inequalities in OSH practice

WHY

Gender-neutral policies are supposed to use the knowledge of gender differences in a given context to overcome biases in delivery, to ensure that they target and benefit both women and men irrespective of their sex.

Some policies that appear gender-neutral may be shown, after a close assessment to be gender-blind, meaning that they do not specifically recognize gender differences. Not acknowledging gender differences may mean that apparently neutral policies impact differently on women and men and reinforce existing inequalities. A lack of distinction between male and female needs and characteristics provides for assumptions which incorporate biases in favour of existing gender relations by not reflecting the substantial differences in the lives of women and men.

OSH is a core aspect of promoting gender equality. Still, gender is often neglected in the design of policies and the planning and implementation of OSH prevention strategies. A "gender-neutral equals gender-blind" approach assumes that general preventive interventions will be just as effective for women as men, this may not be the case as women and men remain highly segregated across and between sectors and across and within jobs. For equity purposes, policies on OSH should take into account the gender division of labour and the socio-economic and cultural contexts, as inequalities both in and outside the workplace can have an impact on the health and safety of all workers, in particular women.

HOW

In order to address gender inequalities in OSH policies, priority setting and resource allocation:

- National authorities with responsibilities for developing OSH policies and strategies should adopt a coherent national policy on OSH through a multi-sectoral, gender-sensitive approach which recognizes that women and men are exposed to different risks and may react differently to the same risks because of their different biological makeup, working and living conditions, and gender roles. Such policy should be formulated, implemented and periodically reviewed in the light of national conditions and practice and in consultation with employers' and workers' organizations.
- In establishing priorities for the design of such policy, national authorities should ensure considering high-risk sectors/occupations, men dominated sectors, and women dominated sectors, and taking into account the total number of workers in different sectors.

- National authorities, employers' and workers' organizations should promote the involvement of both women and men in national and sectoral tripartite bodies and in bipartite committees at the enterprise level, when dealing with the identification of OSH priorities for action, as well as the development and implementation of OSH policies and strategies.

Guideline 3
Ensuring consideration of gender differences in risk management

WHY

Risk assessment and management emphasizes the need to adapt the work to the individual worker, to identify the risks to which workers may be exposed and protect workers against them.

The management of diversity in the workplace requires inclusive risk management measures which pay attention to the specific risks faced by women and men, young workers, older workers, migrants or persons with disabilities; and necessitates the design of specific preventive and protective measures according to the requirements of those groups of workers.

Gender differences in exposure to musculoskeletal disorder risks

Musculoskeletal disorders (MSDs) are the most common health impairments in the workplace. Women tend to suffer more from pain in the upper back and upper limbs as a result of repetitive work in both manufacturing and office work, this is accentuated during pregnancy. They also often have jobs which require prolonged standing; while men tend to suffer more from lower-back pain from exerting high force at work. Research in North America has highlighted a propensity to disbelieve in the occupational origin of women's MSD problems, and men's claims for compensation for MSDs have been found to be accepted almost twice as often as those from women workers.[2]

The *5th European Working Conditions Survey* of 2010 showed that European workers were as exposed to the same physical hazards as they were 20 years previously, and that men and women continue to be exposed differently. For example, 42 per cent of men workers and only 24 per cent of women workers, carry heavy loads. In contrast, 13 per cent of women, but only five per cent of men, lift or move people as part of their work.[3] The survey also showed that physical hazards are not confined to manual workers. Almost one in six (16 per cent) of workers are exposed to strenuous positions almost all the time; and one in three (30 per cent) between a quarter and three quarters of the time. Repetitive hand or arm movements are a feature of work for more European workers than they were 10 years ago. However, protective legislation does not always reflect the risk factors for MSDs found in women's work. For example, the European Union's answer to the growth of MSDs has been to regulate the manual handling of

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[2] Kilbom, Å.; Messing, K. 1998. "Work-related musculoskeletal disorders", in Kilbom, Å.; Messing. K.; Bildt Thorbjornsson, C. (eds.): *Women's health at work* (Solna, Arbetslivsinstitutet).

[3] Eurofund. 2012. *Fifth European Working Conditions survey – 2010*. Available at: www.eurofound.europa.eu/surveys/ewcs/2010/index.htm

loads on terms more generally applicable to male than female work, i.e. taking a male worker as the standard worker. More recently the European Commission has, however, included in the Commission's Staff Working Document on Actions to implement the Strategy for Equality between Women and Men 2010-2015, measures that 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 on MSD.[4]

Psychosocial risks: stress, violence and sexual harassment at work

Due to the type of work that many women carry out and because of societal roles and social structures, they are generally at a higher risk of psychosocial hazards and risks that can cause work-related stress, burnout, violence, discrimination and harassment. Women entering non-traditional occupations are particularly at risk of discrimination and sexual harassment.

Research has found that, women's stress levels remain high after work, particularly if they have children living at home. Men, however, generally unwind rapidly at the end of the working day.[5]

Reproductive health

Whilst in general, men's OSH has received more attention than women's, this is not true for reproductive health. Occupational research and measures to protect workers' reproductive health at work have focused primarily on protecting pregnant women – and particularly the foetus.

There are many workplace hazards that can affect the reproductive health of both sexes and their offspring. These include chemical, biological and physical hazards including pesticides, metals, dyes and solvents; noise and vibration; radiation; and infectious diseases. In addition, heavy lifting, standing or sitting for long periods of time have all been identified as occupational risks for pregnant women. Certain hazards can also affect men's fertility, sex drive or sexual performance as well as their ability to father healthy children, and some can cause cancer of male reproductive organs. They can also affect the woman, the child and the pregnancy, even if they have not been directly exposed to harmful agents themselves if they are carried in sperm or seminal fluid. It is important that both in national and workplace policy a gender-sensitive approach is adopted and the wider reproductive health of all workers, male and female, is considered.

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[4] 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}.

[5] World Health Organization (WHO). 2006. *Gender equality, work and health: A review of the evidence.*

HOW

- In the design of all risk management strategies and their implementation in the workplace, the characteristics of both female and male dominated jobs, the specific features of the jobs (who does what, when, how and for how long), and women and men's biological differences in exposures and health outcomes, as well as the different responsibilities women and men have at home should be considered.

  Further detail regarding psychosocial, MSDs and reproductive health can be found below.

Psychosocial risks

- National governments should introduce specific legislation and guidance requiring employers, as part of the workplace risk assessment process, to assess psychosocial risks associated with stress, work-related violence and harassment and put into place measures to prevent or control those risks.
- Employers should ensure that psychosocial risks are taken into account in risk assessment and management and that gender-specific preventive measures, if required, are put in place for all workers.
- Employers should have in place appropriate procedures for dealing with work-related violence including preventive measures, mediation and post incident counselling. Gender roles, behaviours and needs should be taken into account in establishing such measures.
- Workers organizations' should provide training to their OSH representatives to enable them to effectively respond and negotiate appropriate control measures to tackle stress, harassment and violence in their workplace.

Musculoskeletal Disorders

- Safety and health authorities should develop ergonomic standards that take into account the characteristics found in jobs predominantly undertaken by both sexes, such as carrying of heavy loads, highly repetitive movements, strenuous positions and prolonged sitting and standing.
- Employers should assess and control MSDs through individual (gender specific) risk assessments resulting in the identification and implementation of appropriate control measures. Risk assessments should include assessing postural problems including prolonged standing, sitting and highly repetitive tasks.
- Workers organizations' should provide information about MSDs to OSH representatives to raise awareness and involve men and women workers sharing this information in their workplace.

Reproductive health

- National governments should introduce legislation requiring employers' risk assessments to assess whether there are risks to the reproductive health of men and women workers and to prevent any exposure that could cause such a risk.

- Safety and health authorities should raise awareness about the potential occupational risks to male and female reproductive health through information, advice and guidance aimed at workers and employers and by ensuring that labour inspectors include these risks and any necessary control measures as part of their workplace inspections.
- Employers should ensure that their OSH policies and programmes address these wider risks to male and female reproduction and put into place measures to prevent exposure to any risks.
- Workers organizations' should negotiate the right and necessary facilities for new mothers to be able to breastfeed their babies at work in a private and hygienic environment.

Pakistan – Outlawing sexual harassment

Pakistan has passed a law prohibiting sexual harassment in the workplace, the Protection Against Harassment of Women at Workplace Act 2010. The Alliance Against Sexual Harassment at Workplace has published a guide to the law to assist organizations in Pakistan to fully comply with the Act, which includes mandatory adoption of a Code of Conduct prohibiting sexual harassment in the workplace.

The guide provides advice on employers' responsibilities: including establishing an inquiry committee for complaints by victims, putting formal and informal procedures in place and using an ombudsmen to hear complaints. It also provides a detailed definition of sexual harassment, guidance for the inquiry process, and how to file sexual harassment complaints through the police.

Cruz A. and Klinger S., Working paper 3/2011 Gender-based violence in the world of work: Overview and selected bibliography, ILO, Geneva

ILO Convention on maternity protection

In June 2000, the ILO formally adopted Maternity Protection Convention (No. 183) and it's accompanying Recommendation (No.191)

The Convention also sets out that pregnant women should not be obliged to carry out work that is a significant risk to her health and safety or that of her child and it provides for the elimination of the risk, additional paid leave to avoid exposure if the risk cannot be eliminated, the conditions of work cannot be adapted or a transfer to another post is not possible; and the right to return to her job or an equivalent job as soon as it is safe for her to do so.

Recommendation (No. 191) provides for specific risk assessment and management of the following risks concerning pregnant women:

(a) arduous work involving the manual lifting, carrying, pushing or pulling of loads;

(b) work involving exposure to biological, chemical or physical agents which represent a reproductive health hazard;

(c) work requiring special equilibrium;

(d) work involving physical strain due to prolonged periods of sitting or standing, to extreme temperatures, or to vibration.

(e) night work if a medical certificate declares such work to be incompatible with her pregnancy or nursing.

ILO, 2000

Guideline 4

OSH research should properly take into account gender differences

WHY

Research on OSH is of vital importance in stimulating and informing action to improve safety and health in the workplace. However, research tools and methods on OSH that were originally developed in relation to predominantly male dominated sectors may not be relevant to analysing women's jobs to achieve this desired improvement.

Most studies looking at women's occupational health have concentrated on sectors where they predominate, such as health care, as well as on psychosocial stressors. Very few toxicological and physiological studies have been carried out. Researchers have often not considered gender and sex-specific factors when designing studies and analysing data rendering the study "gender-blind". This is demonstrated by the use of gender-neutral expressions such as "worker", "employee" or "driver" making it impossible to tell whether men or women or both sexes were included.

This situation has been improving. Research has found that even where men and women have the same job, they may carry out different tasks and have different perceptions of the risks generated by the work involved and different health outcomes. For example, "light" tasks assigned to women hospital cleaners actually included high workloads with postural constraints, repeated movements, a constant work pace, very little rest time, with frequent static postures and bent or stretched positions. "Heavy" tasks assigned to male hospital cleaners, such as sweeping, were carried out in less tiring, upright positions.[6]

HOW

Research on OSH should be more gender sensitive in order to improve OSH information for policy making and action in the workplace by:

- Encouraging organizations to fund research and research institutions to promote interdisciplinary research and a holistic approach to OSH with strong epidemiological, ergonomic and social science components, in order to gain a better understanding of gender issues in OSH. This should also ensure that occupations and sectors of particular relevance to women that have previously been neglected are now included in research programmes (for instance domestic work and the informal economy).

[6] European Agency for Safety and Health at Work. 2003. *Gender issues in safety and health at work — A review*.

- Improving the scientific rigor and quality of research methods and tools (such as surveys and interviews) and their validation. By furthering the inclusion of women in trials and toxicological and epidemiological studies on exposure, taking into account physiological differences, including the impact on the reproductive functions of both men and women.
- When analysing the results ensuring other determinants such as, reconciling work and family, relations with clients and sexual harassment, and the work-home interface are taken into account.

United States – The National Institute for Occupational Safety and Health (NIOSH) research programme

NIOSH is the federal agency responsible for conducting research and making recommendations for the prevention of work-related injury and illness in the United States. It has carried out a number of activities on gender and OSH. These include an expanding research programme to address the OSH needs of working women. Research areas include:

- musculoskeletal disorders (for example, among women in the telecommunication, healthcare, service and data entry industries);
- identification of workplace factors particularly stressful to women, and potential prevention measures;
- reproductive hazards;
- violence at work;
- women in non-traditional employment (for example in construction, including the use of tools, machinery and personal protective equipment);
- cancer (including possible work links to cervical and breast cancers); and
- the health and safety of healthcare workers.

NIOSH http://www.cdc.gov/niosh/topics/women/

Guideline 5

Developing gender sensitive OSH indicators based on sex-disaggregated data

WHY

OSH indicators provide the framework for assessing the extent to which workers are protected from work-related hazards and risks. They are used by enterprises, governments and other stakeholders to formulate policies and programmes for the prevention of occupational injuries, diseases and fatalities, as well as to monitor the implementation of these policies and programmes and to signal particular areas of increasing risk such as a specific industry, occupation or location. They include the following:

- **Indicators of outcome**, such as number of occupational injuries and diseases, number of workers involved and work days lost;
- **Indicators of capacity and capability**, such as number of inspectors or health professionals dealing with OSH; and
- **Indicators of activities**, such as number of trainee days, number of inspections.

The limitations in the application of existing OSH indicators are due to the fact that they focus on traditional employment patterns, occupational injuries and diseases predominantly represented by male workers. A framework of gender-responsive indicators addressing health determinants, outcomes and system's performance are missing. These gender-responsive indicators rely on quantitative and qualitative sex-disaggregated data.

Sex-disaggregated data is essential for gender-sensitive research, analysis, strategic planning, implementation, monitoring and evaluation of programmes and projects as it presents information separately for women and men. Sex-disaggregated data reflects roles, real situations, general conditions of women and men in different contexts. Without sex-disaggregated data, it is more difficult to identify hazards and risks and the type of occupational injuries and diseases specifically affecting each sex and this hinders the development of effective OSH policies. Not all countries collect sex-disaggregated data.

In this regard there is still a need to improve gender sensitivity in collecting, analysing and disseminating data on occupational injuries and diseases in order to obtain more accurate information for prevention purposes and policy design. Identifying the health gap between men and women at work should include the collection, management and analysis of sex-disaggregated data for planning, monitoring and evaluating the impacts of preventive measures and policies on OSH.

HOW

Data can be drawn from official OSH statistics which contain information by gender in, amongst others, the following topic areas:

- Safety and health outcomes, e.g. accident records, morbidity and mortality.
- Health determinants, e.g. biological, environmental, social & economic factors.
- Health system performance, e.g. access to health services.

The development of sex-disaggregated data allows for tackling OSH inequalities at work as it identifies issues that would be gender specific.

The sex-disaggregated data on OSH could then be used to:

- Identify and assess the different working conditions of women and men, including changes over time.
- Improve knowledge and understanding of the impact of working conditions and environments on women's and men's occupational health.
- Identify the main areas of concern, establish priorities and develop the most effective preventive measures for both women and men.
- Allocate adequate resources according to real needs in an equitable manner.
- Evaluate and monitor outcomes by gender.
- Present and publish progress with indicators by gender.

NRW Institute of Health and Work (LIGA.NRW), Germany – Tackling gender health inequalities at work by use of gender-disaggregated data

LIGA.NWR adopted an approach in providing knowledge about gender inequities and developing gender-sensitive health indicators to identify key differences between women and men in relation to the social determinants of health and women and men health outcomes in order to support policy change at enterprise level.

The NRW Observatory of Health Risks at Work is the main data base which provides information on specific categories of workers, industrial sectors, exposures and health outcomes. The sources are a combination of administrative registers (census, occupational disease registers, exposure registers), and official statistics and periodical surveys of the workforce every 5 years that include exposures, ill-health and coping behaviours and stratified sampling which allows for analysis of data by gender, occupation and/or associated tasks.

The analysis of gender-disaggregated data inquired into both biological (sex-based) and sociocultural (gender-based) differences between women and men. The findings showed that the pathways between work-related inequalities and inequities and their impact on health are circular and multicausal. Therefore, many potential policies that affect health lie outside the traditional domain of OSH. Due to the above they recommended that the compilation of data should anticipate interaction of factors from inside and outside work and their different effects on the health of women and men be assessed.

This assessment helped the institute to generate evidence about the gender gap in occupational health at work and facilitate change in setting new policy targets and identifying appropriate measures and approaches to OSH taking into account both women's and men's differences and needs, even when involved in the same occupations and tasks.

Landenszentrum Gesundheit Nordrhein-Westfalen
http://www.lzg.gc.nrw.de/themen/gesundheit_berichte_daten/index.html

Guideline 6:
Promoting equal access to occupational health services and health care for all workers

WHY

The World Health Organization estimates that in developing countries only five to ten per cent of the working population has access to occupational health services.

Occupational health services are those dedicated to prevention and referral for treatment to adequate health care services in the context of the workplace. Some occupational health service providers have multidisciplinary teams including occupational hygienists, ergonomists, psychologists, safety and health specialists and counsellors. Across the world there are different models for the provision of occupational health services. In Europe these vary from the French system, grounded in occupational medicine and mandatory medical examinations, to the multidisciplinary models of Scandinavia.

A report on Sweden's occupational health service found that 73 per cent of employees had access to an occupational health centre, including almost all state employees, but only 66 per cent of private employees. There were no significant differences between men's and women's access to occupational health service centres, although in the year the study was undertaken (1995) men visited them more frequently than women.[7]

A study in Québec showed that educational opportunities were more limited for injured women workers and that compensation for the inability to assume usual household responsibilities was more readily granted for household tasks usually undertaken by men.[8]

Inequalities in access to occupational health services and health care contribute to poor health. Both in industrialized and developing countries, changing patterns of employment mean that an increasing proportion of the working population are employed in small enterprises where there may be no ready access to occupational health services. Workers in the informal economy (the majority of whom are female), and migrant workers facing cultural and language barriers as well as homeworkers (predominantly female) can all face exclusion from occupational health services. In addition, women's work in many countries is still performed in the domestic sphere and in the informal economy and therefore not recorded as occupational and not compensated by work insurance systems.

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[7] Eurofund. 1998. *Report proposes increased employers' responsibility for occupational healthcare*. Available at: www.eurofound.europa.eu/eiro/1998/04/feature/se9804181f.htm

[8] Lippel K., Demers D. 1996. *L'Invisibilité: facteur d'exclusion: les femmes victimes de lésions professionnelles*. Revue Canadienne de droit et société. Cited in World Health Organization (WHO). 2006. *Gender equality, work and health: A review of the evidence*.

Several researchers have reported a gender bias in claims for compensation for work-related injury or disease. These suggest that claims from women are generally less likely to be successful than those made by male workers; although in some cases the situation is reversed and male workers are disadvantaged.

HOW

- National governments should ensure that legislation on occupational health services is in place and that the services are accessible to all workers.
- Where appropriate, governments should provide occupational health services through primary health care units and build the capacity of health care providers in primary health care to cater for the needs of all workers, including those in precarious work such as homeworkers and domestic workers.
- Occupational health service providers should ensure their availability at times when shift/night workers can access the service and take steps to make workers who may have cultural or language barriers aware of the service offered, such as providing information in a number of different languages or by carrying out outreach work.
- Employers should provide an in-house occupational health service or buy into a shared service (with other employers) and ensure that the service is equally available for workers of both sexes.
- National authorities and agencies with responsibility for employment injury schemes should examine whether, and if so why, the rate of approval of compensation claims differs between women and men for the same type of work-related injury or disease.
- Workers' organizations should negotiate access to occupational health services for their members and help to resource local community occupational health services or workers' health clinics for those not covered by collective bargaining arrangements. These should include support to women workers.

Australia – Gender, Workplace Injury and Return to Work Research Project

The South Australian Gender, Workplace Injury and Return to Work Research Project examined the South Australian Workers' Rehabilitation and Compensation scheme in order to identify:

- experiences of workplace injury and rehabilitation;
- whether the issues are the same for men and women;
- what helps and hinders people during rehabilitation and return to work – both in the workplace and in workers' rehabilitation and compensation system;
- whether available statistics and research adequately consider gender and broader psychosocial issues; and
- strategies that represent best practice for assisting both men and women workers' rehabilitation and return to work.

It recommended that:

- Rehabilitation and return to work model planning, programmes, policy and contractual arrangements should reflect appropriate understanding of, and response to, gender issues and the pressures involved in balancing work and home life.
- Rehabilitation and return to work models should adopt a gender-based analysis and any major reviews should take account of work, gender, domestic and community life.
- People involved in work injury claims management and rehabilitation should be adequately trained in gender and work/home life issues. This should be demonstrated and continuously monitored.
- Key people who contribute to the compensation and rehabilitation of injured workers should be trained in, and demonstrate, respectful communication skills and an understanding of psychosocial issues related to workplace injury.
- Information about work injury claims should be broken down by occupation and gender.

Source: WorkCover Corporation and the Working Women's Centre (2005) Gender, Workplace Injury and Return to Work – A South Australian perspective, Adelaide, Australia

Guideline 7:
Ensuring the participation of both men and women workers and their representatives in OSH measures, health promotion and decision-making

WHY

Across the world, there is a general lack of gender balance in decision-making. The same is true with regard to decision-making concerning OSH. Women are in a minority in OSH decision-making bodies such as national safety councils, occupational health services and enterprise level safety and health committees.

In the occupational health practice, women tend to be in a minority of professionals who:

- see patients (physicians and clinical psychologists);
- make statistical links between exposures at work and illness (epidemiologists);
- study the mechanisms by which chemicals and radiation produce biological changes (toxicologists);
- assess workplace exposures, whether looking for chemical and physical hazards (industrial hygienists), conditions that produce mental and emotional damage (sociologists and psychologists) or examining work activity to discover constraints on workers (ergonomists).

In addition women are less likely than men to be unionized and have high-level positions in workers organizations' and less likely to participate in OSH committees. According to a study from the Trades Union Congress, while women make up 47 per cent of the workforce in the United Kingdom, for example, they make up just 27 per cent of trade union safety representatives, who sit on joint trade union/employer safety committees at workplace level.[9]

A study in Britain showed that increased consultation between the employer and workers led to greater improvements in OSH. It found, where an employer always consulted workers, the measures to control slips, falls and musculoskeletal disorders were more effective than where consultation was carried out less frequently. Stress was twice as likely to be recognised as a risk where workers were involved in safety and health management.[10]

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[9] 2011. Figures presented at the TUC Seminar on Gender and Occupational Safety and Health (GOSH) Congress House, London, Feb.

[10] Litwin, A. 2000. *Trade Unions and Industrial Injury in Great Britain*.

HOW

- National governments should ensure that equality and diversity initiatives aimed at increasing the participation of women in decision-making extend into the area of OSH including their representation in OSH national committees.
- Safety and health authorities should examine the gender balance of their workforce and if necessary take steps to encourage the employment and promotion of women in order to ensure that they are represented at all levels of the organization.
- Employers should consult workers and their representatives about safety and health, ensuring that women workers are properly consulted and involved in OSH decision-making and encourage women workers to participate in OSH bipartite committees.
- Workers organizations' should encourage women members to participate in OSH committees as well as taking into account specific needs in collective agreements, such as working schedules that do not conflict with women and men's family responsibilities.
- In countries and situations where women are not involved in workers organizations, or are not well represented by them, grass-roots women's organizations could, whenever possible, be consulted and involved in OSH decision making.

South-East Asia-Home-based workers networks

Across the Association of South-East Asian Nations (ASEAN region) there are some 156 million informal workers making up nearly two thirds of total employment. The informal economy is highly gendered, including many women who have been displaced from formal work, especially in the garments industry, as a result of globalization. Women are concentrated among unpaid family workers and industrial homeworkers where earnings are very low and illness and job insecurity high. Work that takes place in households is often "invisible" because it is not carried out in a traditional workplace and is often completely unregulated for OSH risks. Women home-based workers rarely have any assistance when they encounter serious OSH problems.

Home-based workers in Indonesia, the Philippines, Thailand, Laos and Cambodia, the majority of them women, have formed their own networks, which have combined to form Homenet South-East Asia. For example, Homenet Thailand has run programmes and projects, with support from the Thai Health Promotion Foundation, using OSH as an organising tool. PATAMABA is a grassroots organization run and managed by women home-based workers in the Phillipines. It opened its membership to other subsectors of informal workers, including men and spearheaded the launch of Homenet Philippines, a broad coalition of 23 organizations comprising home-based workers' groups and NGOs of various affiliations with a total membership reach of around 60,000.

The networks aim to obtain greater visibility in both national and regional policy advocacy for areas including OSH and gender-responsive participatory governance. They aim to extend labour rights and standards to which formal workers are entitled to informal workers and have demanded, for example, funding for projects to train the trainers of homeworkers and other informal workers in order to raise awareness about preventing and minimising work-related diseases and accidents.

http://www.ttl.fi/en/publications/electronic_journals/asian_pacific_newsletter/archives/Documents/Asian_Pacific_NI3_2008.pdf

Germany: Participatory research project at a Hanover hospital

The focus of OSH management in a hospital is often on medical staff, with other groups of workers neglected in risk assessment and health promotion. A project was set up by researchers from the Institute of Ergonomics at the University of Hanover, with the involvement of trade unions, to demonstrate how effective OSH management could be implemented and how to carry out inclusive risk assessments.

As part of the project, the risk assessment carried out for cleaning workers demonstrated how health circles can contribute to the identification of gender-specific safety and health issues. The health circle involving female cleaning staff was originally supposed to discuss working postures, wet work and the risks posed by disinfectants. However, it became obvious that their main concern was psychological pressure rather than physical risks. The researchers assessed the mental stressors the cleaners faced. They then discussed and developed practical solutions to improve working conditions in collaboration with the workers through a health circle. The measures included changing the cleaners' uniform, which was impractical – too hot to wear and constantly catching on equipment. As it was short it also contributed to sexual harassment. As a result of the intervention, the job satisfaction and the self-confidence of the workers increased and risk factors were excluded. The employees also became more aware of OSH issues.

EU-OSHA, 2009

Guideline 8:
Developing gender-sensitive OSH information, education and training

WHY

The provision of information, education and training is crucial in ensuring that gender is mainstreamed into OSH policy and practice. As stated earlier there is a general lack of awareness about the differences in the way that men and women may be exposed to risks at work. This applies to female dominated occupations and sectors; to women workers moving into traditionally male dominated occupations and sectors; to the extra responsibilities that women face as paid workers and unpaid carers for their families and to the psychosocial risks that many women face at work as a result of the threat of violence, harassment or discrimination.

Some researchers have found that traditional masculine gender socialisation encourages men to put their safety and health at risk. Men are more prone to take risks in their leisure time and when driving,[11] and often transpose this attitude to the workplace. They are also more likely to use alcohol, generally and in an attempt to cope with stress, but are less likely to seek medical advice. In contrast, women are more likely to abuse prescription drugs and seek for medical advice and women under stress are more probable to seek social support.[12]

HOW

It is therefore important to raise awareness about the different way sexes are exposed to risks. It is important that information, education and training are provided to all those who can play a role in mainstreaming gender into OSH, including:

- employers;
- labour and OSH inspectors;
- worker representatives and workers;
- safety practitioners carrying out risk assessments;
- occupational health researchers; and
- occupational health professionals such as doctors and nurses and other experts including safety engineers and physiotherapists.

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[11] Kolip P. 2008. *Gender sensitive promotion and prevention*. Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz.

[12] Briar C. 2009. *Hidden Health Hazards in Women's Work*.

- National governments should improve gender-sensitive information and education about the hazards and risks found in the workplace. Particular attention should be paid to ensuring that those hazards and risks faced by women have been identified. Governments should also require the inclusion of gender-sensitive OSH material in adult education courses and in the secondary school curricula.
- Safety and health authorities should take gender into account when developing and delivering OSH information, advice, guidance and training materials aimed at labour inspectors, employers and workers. When publicizing these materials authorities should ensure the participation of both sexes.
- Employers' and workers' organizations should produce guidelines on gender mainstreaming in OSH to support action in the workplace.
- Workers organizations' should provide gender sensitive information, guidance and training materials to safety representatives as part of an awareness raising strategy.
- Employers should ensure that gender differences in health-related behaviour are taken into consideration in the planning of training on OSH, health promotion and prevention initiatives in the workplace.

Philippines – Project to develop gender sensitive instructional materials in the technical vocational education and training (TVET) curriculum

The Private Enterprise Accelerated Resource Linkages Project Phase 2 (Pearl2), a private sector development project supported by the Canadian International Development Agency worked directly with business support organizations and investment promotion centres to support the development of small and medium enterprises (SMEs) to create meaningful jobs for both men and women. The goal was to contribute to reduction of poverty in the Philippines through equitable and sustainable development. The project teamed up with Isis International, an organization working through media and information and communications technologies towards achieving women's human rights and facilitating networking and information sharing of women's movements in the global South, to produce awareness raising materials around gender fairness aimed at SMEs in the Philippines.

The organizations ran a joint three-day intensive interactive workshop, *A Business Case for Gender Fair Practices*, which included information on gender specific OSH as well as balancing work and family life. A presentation on gender mainstreaming highlighted the need for the promotion of gender equality in access to opportunities for training, education, participation in decision making; and the need to address gender issues including sexual harassment, the harmonization of work and family life and domestic violence.

In addition, the first phase of the *Economic Empowerment of Women through Enhanced Technology Based Community Training Program* project focused on the development of an enhanced TVET curriculum, with the gender component embedded into the basic competencies. The project also developed gender-sensitive instructional materials to be used by all TVET trainers.

The project aimed to shift attitudes and change the current mindset restricting women's participation in education, training and the labour market. It embedded gender concepts, values and principles into each unit of competency and included gender issues in OSH. The unit concerned with OSH procedures included the identification, evaluation and control of risks and hazards and the maintenance of OSH awareness, including women's concerns and issues.

http://iveta2010.cpsctech.org/downloads/materials/full%20papers/twc_gutierrez.pdf

Mainstreaming gender into OSH in the Austrian labour inspectorate

In August 2003 the Austrian labour inspectorate initiated a project to mainstream gender into the organization of the labour inspectorate and the working lives of inspectors in order to make them more aware of gender issues and to mainstream gender into the daily OSH work of the labour inspectorate. The initiative followed a Total Quality Management project which highlighted the need for gender mainstreaming in order to avoid gender stereotyping in the inspection process.

A gender mainstreaming framework and strategy was put into place for the labour inspectorate. This resulted in information, a survey, tools including indicators and checklists and cooperation in pilot sites, implemented through a gender mainstreaming group and Intranet portal.

The project team developed guidelines for inspectors supported by training. The guidelines advise inspectors to always speak to both women and men at company level and set out questions they should ask themselves about their interventions including: "Does my advice cover both men and women workers?" or "Will my advice have results for both men and women workers?".

In addition to training and guidelines aimed at inspectors, the project also raised public awareness through posters, appointed gender mainstreaming experts, set up a network and developed gender mainstreaming benchmarks. Gender mainstreaming was subsequently integrated into the Austrian OSH Strategy (2007-12).

The project was successful because there was a clear mandate from senior management, the introduction of teams with gender mainstreaming experts, the introduction of gender mainstreaming standards and the provision of training and information.

EU-OSHA, 2005

Guideline 9

Designing work equipment, tools and personal protective equipment for both men and women

WHY

Across the world, work equipment, tools and personal protective equipment (PPE), have been traditionally designed for the male body size and shape. Moreover, the design of most PPE is based on the sizes and characteristics of male populations from certain countries in Europe, Canada and the United States. As a result, not only women, but also many men experience problems finding suitable and comfortable PPE because they do not conform to this standard male worker model. With global migration this situation has become more evident in multi ethnic workplaces. Poor fit to work equipment and tools can lead to poor working posture, leading to an increased risk of MSD's and poor fit to PPE will lead to reduced protection. Hand tools and workstation heights are often uncomfortable for workers who are smaller or indeed taller and larger than the "standard" worker. While the use of work equipment, machinery and tools designed for men contributes to women's work accident rates; men are also involved in accidents because of a poor match between equipment, tools, PPE and the worker. Women entering traditionally male jobs in areas like construction, engineering and the emergency services are particularly at risk from inappropriately designed equipment, tools and PPE. With the incorporation of women into traditional "male" jobs and world-wide migration, certain countries started developing anthropometric standards to take into account the diversity of working populations (gender and body size) however this is still not widespread.

HOW

In order to ensure that the provision and use of equipment, tools and PPE are suitable for both men and women workers:

- Safety and health authorities should ensure that designers of work equipment, tools and PPE develop or use anthropometric data that reflect the characteristics of the actual working population thereby ensuring equipment, tools and PPE are suitable for both sexes.
- Employers should, when exposure to hazards cannot be otherwise controlled, provide workers with suitable PPE at no cost. They should involve both men and women workers in the selection of PPE and train all workers in its use including its maintenance.
- Workers and their representatives should cooperate with the employer in fulfilling his/her duties by using equipment and PPE correctly and not rendering it inoperative.

Australia – Ensuring the availability of anthropometric data for equipment design

A pilot research project *Sizing Up Australia: How contemporary is the anthropometric data Australian designers use*, commissioned by Safe Work Australia investigated the suitability and use of anthropometric data by designers of equipment and tools for Australian industry.

The results showed a lack of good quality, reliable anthropometric data on the Australian working population available to designers of equipment and tools. It also reported that currently available data does not reflect the Australian working population, particularly at the extremes of the population (the very small and the very large) and designers are forced to make 'educated guesses', using themselves or those around them as models, or taking other short cuts in their design practice. The report recommends the development of an up-to-date, relevant, Australian anthropometric database that includes 3D body scans available at low cost so that designers can verify and fine tune their designs.

Safe Work Australia, 2009

Canada – Industrial Accident Prevention Association and Ontario Women's Directorate publication *Personal Protective Equipment For Women – Addressing the Need*

In response to the problem of limited availability of PPE for women, the Industrial Accident Prevention Association and the Ontario Women's Directorate jointly developed a guide to PPE aimed at users of PPE, employers, unions, workplace health and safety organizations and manufacturers and suppliers, together with a directory listing manufacturers and suppliers able to meet the PPE needs of women workers. As a "change agent project", it aimed to increase worker health and safety protection; remove a barrier to equality of employment for women; and ensure that women entering non-traditional fields could perform efficiently the given tasks of the job.

Ontario Women's Directorate and the Industrial Accident Prevention Association, 2006

Guideline 10:
Working time arrangements and work-life balance

WHY

As a consequence of a world increasingly working around the clock, there are now millions of shift workers including night workers. Nearly 20 per cent of the working population in Europe and North America now works shifts, most commonly in the healthcare, manufacturing/industrial, transport, communications and the hospitality sectors.[13] Shift work is associated with high levels of stress, particularly where work schedules are inflexible and workers do not have control over their work. Family life and social life is often disrupted, with workers becoming isolated from friends and family. Additionally female workers working shifts can face an increased risk of violence when, late at night, relying on public transport. Other health effects in both men and women include reliance on sleeping pills or stimulants, drug and alcohol misuse and disruption of the hormonal system.

Working shifts can cause cardiovascular and digestive disorders and disruption of the internal biological clock or 'circadian rhythm' which regulates the body's temperature, digestion, blood pressure, secretion of adrenalin and sleeping and waking patterns. Sleep loss and fatigue associated with shift work can lower performance and increase the risk of accidents.

There is a clear gender gap in working time. Part-time employment is much more common among women than men. More than twice the number of women than men work part-time across the world, although part-time working is increasing almost everywhere for women and men alike.[14] Part-time workers may not always receive equal safety and health protection and although they spend less time at work, their injury rate per hour worked is higher than those working full-time.

At the other end of the scale, an estimated 22 per cent of the global workforce now works more than 48 hours a week. Men tend to work longer average hours than women worldwide; although an ILO study found that the Philippines are an exception to this rule. There, employed women are two to three times more likely than men to work exceptionally long hours in paid work, sometimes more than 64 hours a week.[15] The effect of unpaid work outside normal employment (working at home), must not be forgotten as this work effects the total hours worked by those undertaking it, normally women workers. As with shift work, fatigue associated with working long hours, (wherever the work is carried out), can lead to an increase in the risk of accidents.

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[13] Unite. 2010. *Shift work and night work – A health and safety issue for Unite members*. Available at: www.unitetheunion.org/uploaded/documents/Shift%20work%20and%20night%20work%20(Unite%20H%26S%20briefing)11-4950.pdf.

[14] United Nations Department of Economic and Social Affairs. 2010. The world's women 2010 – *Trends and statistics* (New York, NY, United Nations).

[15] Lee, S.; McCann, D.; Messenger, J. C. 2007. *Working time around the world: Trends in working hours, laws and policies in a global comparative perspective* (Geneva, International Labour Organization).

HOW

- National governments should ensure that working time is considered an OSH issue and regulated as such.
- National governments should ensure that OSH legislation requires employers, where relevant, to consider the interaction between work and the home and ensure that workers can have a reasonable work-life balance.
- Safety and health authorities should raise awareness about the health effects of working shifts and long hours through information, advice and guidance for employers and ensure that labour inspectors include examining the impact of working patterns in their OSH inspections.
- Employers should ensure that risk assessments take into account the OSH aspects of working time patterns, identifying hazards and putting into place measures to control or mitigate the risks for all workers, including equal protection for part-time workers.
- Employers should take into account workers' needs for flexibility in their working hours and patterns and give them notice of any changes in good time.
- Workers organizations' should provide training and information, and raise awareness among their representatives and members about the health effects of working time patterns and ensure that these, and measures to improve work/life balance are included on their bargaining agenda.

Bibliography

- Briar, C. Ed. 2009. *Hidden health hazards in women's work* (Wellington, Dunmore Publishing Ltd).
- Centro Internacional de Formación de la Organización Internacional del Trabajo. 2011. *Salud y seguridad en el trabajo desde la perspectiva de género – Módulo para la formación de hombres y mujeres sindicalistas* (Turin, Centro Internacional de Formación de la Organización Internacional del Trabajo)
- Dewe, P; Kompier, M. 2008. *Foresight Mental Capital and Wellbeing Project. Wellbeing and work: Future challenges* (London, The Government Office for Science).
- Eurofund. 1998. *Report proposes increased employers' responsibility for occupational healthcare*. Available at: www.eurofound.europa.eu/eiro/1998/04/feature/se9804181f.htm.
- —. 2012. *Fifth European Working Conditions survey – 2010*. Available at: www.eurofound.europa.eu/surveys/ewcs/2010/index.htm.
- European Agency for Safety and Health at Work. 2003. *Gender issues in safety and health at work — A review* (Luxembourg, Office for Official Publications of the European Communities).
- —. 2011. *Risks and trends in the safety and health of women at work*. Available at: osha.europa.eu/en/publications/reports/new-risks-trends-osh-women.
- European Foundation for the Improvement of Living and Working Conditions. 2010. *Foundation Findings: Physical and psychological violence at the workplace* (Brussels, European Foundation for the Improvement of Living and Working Conditions). Available at: www.eurofound.europa.eu/pubdocs/2010/54/en/1/EF1054EN.pdf.
- Fayad, R.; Nuwayhid, I; Tamim, H; Kassak, K; Khogali, M. 2003. "Cost of work-related injuries in insured workplaces in Lebanon", in *Bulletin of the World Health Organization*, Vol. 81, No. 7, pp. 506-516.
- Forastieri, V. 2000. *Information note on women workers and gender issues on occupational safety and health* (Geneva, Safework International Programme on Safety Health and the Environment - International Labour Organization).
- —. 2001. *Women workers and gender issues on occupational safety and health*, (Geneva, Safework International Programme on Safety Health and the Environment – International Labour Organization).
- Health and Safety Executive (HSE). 2000. *Occupational health advisory committee report and recommendations on improving access to occupational health support*. Available at: www.hse.gov.uk/aboutus/meetings/iacs/ohac/access.htm.

- —. 2006. *Horizon Scanning Intelligence Group Short Report, Flexible Working and Employment Patterns*. Available at: www.hse.gov.uk/horizons/precwrkreport.pdf.
- —. 2012. *Gender*. Available at: www.hse.gov.uk/diversity/gender.htm.
- International Labour Organization (ILO). 2007. *Manual for gender audit facilitators: The ILO participatory gender audit methodology* (Geneva, International Labour Organization).
- International Labour Organization. Sub-Regional Office for South-East Asia and the Pacific. 2009. *Philippine harmonized gender and development guidelines for project development, implementation, monitoring and evaluation: The ILO GAD checklists* (Manila, International Labour Organization Sub-Regional Office for South-East Asia and the Pacific).
- Jafry, T. 2000. "Women, human capital and livelihoods: An ergonomic perspective", in *Natural Resource perspectives*, Vol. 54. Available at: www.odi.org.uk/resources/download/2091.pdf.
- Kane, P. 1999. *Women and occupational health: Issues and policy prepared for the global commission on women's health* (Geneva, World Health Organization).
- Kieth, M.; Brophy, J.; Kirby, P.; Rosskam, E. 2002. *Barefoot research – a workers' manual for organising on work security* (Geneva, International Labour Organization).
- Kilbom, Å.; Messing, K. 1998. "Work-related musculoskeletal disorders", in Kilbom, Å.; Messing. K.; Bildt Thorbjornsson, C. (eds.): Women's health at work (Solna, Arbetslivsinstitutet).
- Labour Research Department. 2009. *Stress and mental health at work – A guide for union reps* (London, Labour Research Department).
- —. 2010. "Shift workers need a break", in *Labour Research Magazine*, June, pp. 15-16.
- Lehtinen, S. (ed.). 2008. African Newsletter on Occupational Health and Safety, Vol. 18, No. 3. Available at: www.ttl.fi/en/publications/electronic_journals/african_newsletter/Documents/african_newsletter3_2008.pdf.
- LexisNexis UK. 2008. "A small step for workers – working time 10 years on", in *Health and Safety Bulletin*, Oct., pp. 17-20.
- Litwin, A. S. 2000. Trade Unions and Industrial Injury in Great Britain (London, London School of Economics).Lee, S.; McCann, D.; Messenger, J. C. 2007. *Working time around the world: Trends in working hours, laws and policies in a global comparative perspective* (Geneva, International Labour Organization).
- Messing, K. 1998. One-eyed science – *Occupational health and women workers* (Philadelphia, PA, Temple University Press).
- —. 1999. *Integrating gender in ergonomic analysis – Strategies for transforming women's work* (Brussels, European Trade Union Technical Bureau for Health and Safety).
- —. 2007. "Improving the health of women in the workforce: An action plan developed by Canadian researchers and worker representatives", in *GOHNET newsletter*, Issue 13.

- Östlin, P.; Eckermann, E.; Shanka Mishra, U.; Nkowane, M; Wallstram, E. 2007. "Gender and Health Promotion: A multisectoral policy approach", in *Health Promotion International*, Vol. 21, No. 51, pp. 25-35.
- Paul, J. 2004. *Healthy beginnings: Guidance on safe maternity at work* (Geneva, International Labour Organization).
- Reilly, B.; Paci, P.; Holl, P. 1995. "Unions, safety committees and workplace injuries", in *British Journal of Industrial Relations*, Vol. 33, No. 2, pp. 275–288.
- Trade Union Congress (TUC). 2010. *Focus on health and safety: Trade union trends survey – TUC biennial survey of safety reps 2010*. Available at: http://www.tuc.org.uk/extras/safetyrepssurvey2010.pdf.
- UK Department for Trade and Industry. 2007. *Workplace representatives: A review of their facilities and facility time*. Available at: webarchive.nationalarchives.gov.uk/+/http:/www.berr.gov.uk/files/file36336.pdf.
- Unite. 2010. *Shift work and night work – A health and safety issue for Unite members*. Available at: www.unitetheunion.org/uploaded/documents/Shift%20work%20and%20night%20work%20(Unite%20H%26S%20briefing)11-4950.pdf.
- United Nations Department of Economic and Social Affairs. 2010. *The world's women 2010 – Trends and statistics* (New York, NY, United Nations).
- World Health Organization (WHO). 2006. *Gender equality, work and health: A review of the evidence* (Geneva, World Health Organization).
- —. 2011. *Building healthy and equitable workplaces for women and men: A resource for employers and worker representatives*, Protecting Workers' Health Series (Geneva, World Health Organization).
- —. 2011. *Gender, work and health* (Geneva, World Health Organization).
- World Bank. 2011. *World development report 2012: Gender equality and development* (Washington, DC., World Bank).

Programme on Safety and Health at Work and the Environment (SafeWork)
International Labour Organization
Route des Morillons 4
CH-1211 Geneva 22
Switzerland

TEL. +41 22 7996715
FAX +41 22 7996878

E-mail: safework@ilo.org
www.ilo.org/safework

ISBN 978-92-2-127068-3