



Healthy
Workplaces
**MANAGE
DANGEROUS
SUBSTANCES**



Vulnerable workers and dangerous substances

Key Points

- Workplace risk assessment and prevention measures for dangerous substances need to target groups of workers with specific needs and higher levels of risk.
- The risks might be greater because these workers are inexperienced, uninformed or physically more vulnerable, because they frequently change jobs or work in sectors where awareness of the issue is low, or because of greater or different physiological sensitivity (e.g. in young apprentices, or because of differences between men and women).
- Specific groups that need to be considered are young workers and those new to the job, maintenance workers, migrant workers, subcontracted workers, workers with medical conditions, pregnant and breastfeeding women, and workers in service sectors with a low level of awareness, which are often female-dominated sectors.
- Workers conducting work at different sites can encounter a range of dangerous substances. A coordinated approach between the worker's manager and the managers of the premises is needed. Communication of relevant information between these parties, including the workers themselves, is of great importance.
- Employers should check their national legislation, so that they know the precise requirements regarding safety and health at work, prohibitions on types of work, the ages at which children may work, limitations and authorisation requirements.

Healthy Workplaces Manage Dangerous Substances

The European Agency for Safety and Health at Work (EU-OSHA) is running a Europe-wide campaign during 2018 and 2019 to promote the prevention of risks from dangerous substances in workplaces. The aim is to reduce the presence of and exposure to dangerous substances in workplaces by raising awareness of the risks and of effective ways of preventing them.

The issue

Employers are required to assess the safety and health risks that any employees are exposed to at work. Risk assessment should take into account specific groups of workers who may be more at risk, e.g. young workers and those new to the job, maintenance workers, migrant workers, subcontracted workers, workers with medical conditions, pregnant and breastfeeding women, and service workers such as cleaners, often female workers. They must inform workers (directly or through their representatives) about the preventive and protective measures implemented to reduce, remove or control risk, and consult them on these measures.

Risk assessment and preventive measures

An employer must consider:

- the layout of the workplace;
- the agents workers will be exposed to;
- how they will handle work equipment;
- how work and processes are organised;
- the extent of safety and health training needed;
- risks posed by particular agents, processes and types of work.

All workers have the right to:

- know what hazards are present in their workplace, what they must do to keep themselves safe and what action to take if there is an accident or emergency;
- receive information, instruction and training on these matters on recruitment, and following a change in job or changes in the workplace (this training should be specific to the job and free of charge);
- be provided with the necessary protective equipment, free of charge;
- participate in safety and health matters — for example by asking questions and reporting any unsafe practices or conditions — and be consulted by their employer on them.

New or young workers



The heightened risk arises from:

- lack of experience of working in an industry or workplace;
- lack of familiarity with the job and the work environment;
- reluctance to raise concerns (or not knowing how to);
- being unaware of existing or potential risks;
- lack of maturity;
- eagerness to impress workmates and managers.



Workplace risk assessment should take into account specific groups of workers that may be more at risk

Workers new to a site may:

- not recognise hazards;
- not understand 'obvious' rules for the use of equipment;
- be unfamiliar with site layout, especially where site hazards may change from day to day;
- ignore warning signs and rules or cut corners.

Special rules apply to young workers under the age of 18. Whether they are permanently employed or in training (e.g. on a work experience placement), they must not be allowed to do work that:

- exceeds their physical or mental capacities;
- exposes them to substances that are toxic or carcinogenic, can cause heritable genetic damage or harm an unborn child or can chronically affect human health in any other way;
- involves risks that they are unlikely to recognise or avoid because of their lack of experience or training or their insufficient attention to safety.

Those under 18 but over the minimum school leaving age can do the above work under very special circumstances, where:

- the work is crucial for their vocational training;
- the work is performed under the supervision of a competent person;
- risks are reduced to the lowest level possible.

Employers need to:

- assess risks before young or new workers start and be aware of substances they might come into contact with;
- give them appropriate work that takes account of their knowledge and experience;
- include not only those working full time but also any casual labourers, for example those hired to help at weekends or during school holidays and those on vocational training or work experience placements;

- have in place the necessary organisation, including specified supervision arrangements, and ensure that supervisors have the competence and time to carry out their roles;
- provide tailored training — a young person might be unfamiliar with ‘obvious’ risks.

If a young worker has any doubts about the safety of any aspect of their job, they have the right and the responsibility to bring their concerns to their supervisor. Ultimately, they have the right to refuse to do unsafe work.

Migrant or temporary workers



Employers need to consider in particular:

- language and communication issues;
- basic competencies such as literacy and numeracy, physical attributes, general health and relevant work experience;
- if vocational qualifications are compatible with those required in the country, and if they are genuine;
- the possible effects of the attitudes and assumptions of workers new to work in the country or of other workers towards them.

Workers may not understand safety and health training/instructions. In particular, they may:

- misunderstand safety-critical information provided by colleagues, or be unable to use them to warn others in an emergency;
- not be able to communicate effectively with supervisors;
- not understand each other, even if they come from the same region of the world or are from similar ethnic groups;
- not recognise hazards;
- not understand ‘obvious’ rules for the use of equipment;
- be unfamiliar with site layout, especially where site hazards may change from day to day, e.g. in construction or cleaning.

Employers should:

- make sure employment agencies and businesses using temporary workers supplied by them have clear, coordinated arrangements for sharing safety and health information before temporary/short-term cover workers start;
- make sure employment agencies supplying temporary workers have carried out suitability checks where relevant;
- plan induction carefully, using photos of hazards where possible, and provide good-quality information in plain, simple language or in the worker’s language.

Workers with medical conditions



Individuals with medical conditions may be more susceptible to the health effects caused by exposure to dangerous substances. For example, some substances can cause sensitisation, affecting the skin or respiratory system. Where workers have become sensitised, further exposure must be prevented, for example by assigning them to a job with no potential for exposure. Workers with damaged skin, including open cuts, are more susceptible to dermal exposure, as chemicals can enter the body more quickly than they can through intact skin.

Health surveillance can help in monitoring if certain medical conditions are made worse by workplace exposure. Where this is the case, the individual’s occupational exposure patterns should be reviewed and a decision made on the need for improved control and/or the need to remove the individual from exposure.

Pregnant or breastfeeding workers



According to Directive 92/85/EEC, pregnant and breastfeeding workers should under no circumstances be obliged to perform duties for which assessment has revealed a risk of exposure to agents that would jeopardise their safety or health. Employers have to assess any risks to safety or health and any possible effects on pregnancy or breastfeeding and take appropriate measures.

These workers may be at risk from processes, working conditions or biological and chemical agents, and these risks will vary depending on their health, and at different stages of the pregnancy. Risks include:

- exposure to infectious diseases;
- exposure to lead;
- exposure to other dangerous substances.

These risks do not need to be assessed separately, but as part of the overall risk assessment.

Employers may need to revisit risk assessments throughout the worker’s pregnancy and:

- temporarily adjust the working conditions and/or hours of work;
- offer suitable alternative work; or
- suspend the worker on paid leave.

Workers may want to share with employers or occupational physicians any advice from doctors or midwives, so that this information can be used in risk assessments.

Workers in service occupations and gender issues



Women and men work in different occupations and sectors, and, within sectors, carry out different tasks, and they are therefore expected to be exposed to different dangerous substances. Female workers are predominant in service sectors, normally characterised by low levels of awareness of the risks posed by dangerous substances, such as cleaning or healthcare.

There are also gender differences in the way some dangerous substances are metabolised or accumulate in the body. Risk assessment should take account of gender issues, identifying less obvious hazards and health problems that are more common in female workers. This should include:

- assessing and measuring dangerous substances prevalent in male- and female-dominated jobs;
- considering specific impacts of hazardous chemicals on women's health, including reproductive health, and initiating specific activities to reduce exposures for women;
- asking female and male workers what problems they encounter in their work, in a structured way;
- avoiding making initial assumptions about what is 'trivial' and who may be exposed;

- considering the entire workforce (including, for example, cleaners and service workers);
- encouraging women to report issues that they think may affect their safety and health at work, as well as health problems that may be related to work;
- carrying out health surveillance relevant to the jobs of male and female workers;
- making sure those doing the assessments have sufficient information and training about gender issues in occupational safety and health;
- paying attention to diverse workforces and adapting work and preventive measures accordingly (e.g. selecting protective equipment to meet individuals' needs, suitable for women and 'non-average' men);
- involving female workers in decision-making and the implementation of solutions;
- making sure that women as well as men are provided with safety and health information and training relevant to the jobs they do, ensuring that part-time, temporary and agency workers are included.

Sources: EU-OSHA and UK Health and Safety Executive web pages on vulnerable workers (<http://www.hse.gov.uk/vulnerable-workers/>).

Further information

OSHWiki article: [Dangerous substances and vulnerable groups](https://oshwiki.eu/wiki/Dangerous_substances_and_vulnerable_groups)
https://oshwiki.eu/wiki/Dangerous_substances_and_vulnerable_groups

EU-OSHA web pages on young people (<https://osha.europa.eu/en/themes/young-workers>) and women and OSH (<https://osha.europa.eu/en/themes/women-and-health-work>)

Factsheet 43: Including gender issues in risk assessment
<https://osha.europa.eu/en/tools-and-publications/publications/factsheets/43/view>

Factsheet 64: Protection for young people in the workplace
<https://osha.europa.eu/en/tools-and-publications/publications/factsheets/64/view>

E-fact 66: Maintenance and hazardous substances
<https://osha.europa.eu/en/tools-and-publications/publications/e-facts/e-fact-66-maintenance-and-hazardous-substances/view>

E-fact 41: Cleaners and dangerous substances
<https://osha.europa.eu/en/tools-and-publications/publications/e-facts/efact41/view>

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