Communicating information about dangerous substances

Introduction
The Agency is producing a series of factsheets on occupational safety and health information about dangerous substances. The European Week for Safety and Health at Work 2003 has focused on effective communication about the risks to workers' health and their management in the workplace is a common challenge for employers, workers, and their representatives. This factsheet presents points to consider for successful communication.

Legislation
EU regulations on classification and labelling (1) set the frame for obligations of producers of chemical substances. They determine important information (2) to be provided in a standardised way in safety labels, risk symbols and safety data sheets available to the users. The directive related to chemical agents (3) specifies that employers shall obtain additional information that is needed for risk assessment from the supplier or other readily available sources. The employers also have to ensure that the workers and/or their representatives are informed and trained on:

- the hazardous properties of the chemical agents handled;
- the level, type and duration of exposure and the circumstances of work involving such agents;
- appropriate precautions to safeguard themselves and other workers at the workplaces;
- the effect of risk-management procedures taken or to be taken;
- relevant occupational exposure limit values or biological limit values;

and where available, the conclusions to be drawn from any health surveillance and exposure assessment already undertaken.

Additionally, the employer shall also ensure that the workers are aware of the changes in these circumstances.

For workers likely to be exposed to carcinogens and mutagens (4) or certain biological agents (5), employers have to keep records including information about exposure and health surveillance. Workers have to be provided with access to their personal data.

These regulations have to be transferred into national legislation. Member States are entitled to include some additional or more stringent provisions for the protection of workers, as the corresponding directives only lay down minimum requirements.

The future EU system of registration, evaluation and authorisation of chemicals REACH aims to increase the availability of relevant information about properties of chemicals, their environmental and health effects, intended uses and risk-reduction measures.

It is therefore strongly recommended that you seek clarification of specific national legislation that may apply relating to the use of dangerous substances in the workplace.

Labelling of chemicals
If a chemical substance or product is classified as dangerous, the manufacturer or the importer must put a danger label on the packaging with information about at least:

- the name or trade name of the substance or product and the name and address of the person responsible for placing it on the market;
- name(s) of the dangerous contents that lead to the danger classification;
- EC registry numbers for substances, for example the Eincs (6) or Elincs (7) number;
- standardised indications of danger, danger symbols (8), risk indications (R-phrases (9)) and safety directions (S-phrases (10)).

Provisions are also laid down for preparations containing several dangerous substances which require several symbols and risk phrases.

Risk symbols, risk (R) phrases and safety (S) phrases are indications of the substance's hazard and of safety measures relating to that substance. Both the R and S phrases are set by the directives of the European Community (11). They are used in the labelling of the packages and in safety data sheets to warn and guide the usage of the dangerous goods and preparations. Risk phrases are standardised presentations of the potential harms of the product for health and safety in normal handling and use, for example R21 ‘Harmful in contact with skin’. Safety phrases and their combinations present preventive measures to be taken such as S15 ‘Keep away from heat’.

For workplace use, extensive and standardised additional information has to be given in the safety data sheets regarding health effects, contents of the product, appropriate protection measures and personal protective equipment.

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(6) European Inventory of Existing Commercial Substances (Eincs), an inventory containing 100 195 substances, see http://ecb.jrc.it/new-chemicals/.
(7) European List of New Chemical Substances, see http://ecb.jrc.it/new-chemicals/
(8) EU regulations on classification and labelling (1) set the frame for obligations of producers of chemical substances. They determine important information (2) to be provided in a standardised way in safety labels, risk symbols and safety data sheets available to the users.
(9) European List of New Chemical Substances, see http://ecb.jrc.it/new-chemicals/
(11) European List of New Chemical Substances, see http://ecb.jrc.it/new-chemicals/
Safety data sheets (SDS)

Chemical manufacturers and suppliers are required to provide professional users with safety data sheets (SDS) that provide information on the properties of the substance, the dangers to the health and environment, hazards based on physico-chemical properties, storage, handling, transport and disposal, and guidance for protection of the workers, for firefighting, measures to be taken following accidental release and first aid measures, as necessary. The main purpose of safety data sheets is to enable employers to determine whether any hazardous chemicals are present in the workplace, and to assess whether there is any risk to the health and safety of workers and/or to the environment arising from their use. Workers or their representatives have to have access to the safety data sheets.

The information contained in the safety data sheets can be the starting point in the identification of the hazards to which workers are exposed and the control measures required. Nevertheless, not all potential conditions of use can be foreseen by the producer. The protection measures recommended in the safety data sheets have therefore to be adapted to the conditions at the specific workplaces.

Other information sources

For some products, such as pharmaceuticals (e.g. cytostatic drugs) or cosmetics (e.g. hairdressing products), safety data sheets do not have to be provided by suppliers.

Even where SDS are available, more information might be needed in some cases. In order to collect the necessary information for assessing risks and taking preventive action, it is then necessary to:

- use other sources (technical documentation, instructions for use, technical and scientific reference papers and journals);
- ask manufacturers and suppliers;
- consult preventive services;
- seek advice from professional organisations (trade associations, chambers of commerce, trade unions, social security and others);
- contact authorities.

Biological agents are classified according to their risk to health. It is advisable to consult national legislation about handling biological agents in the workplace which should include classification tables of hazardous biological agents (microorganisms and parasites) related to risk level, a basis for risk assessment and preventive measures to take when using these substances.

Examples of useful information systems

The interactive web site ‘COSHH essentials’ (13) hosted by the UK Health and Safety Executive has been designed to provide simple step-by-step guidance for small firms for assessment and control of hazardous substances present in the workplace. The site offers information for more than 1 200 substances. An ICSC card summarises essential health and safety information on chemicals for their use at the ‘shop floor’ level by workers and employers. The cards are also available in other languages.

Further information

More examples of successful communication of information and other factsheets from this series on dangerous substances are also available at http://osha.eu.int/ew2003/. This source is being continually updated and developed.

The International Labour Organisation (ILO) has compiled an instruction module for the health and safety committees on how to communicate regarding workplace health and safety issues, including chemical risks at workplaces, between the workers and the employer. This module is freely available at: http://www.itcilo.it/english/actrav/telearn/osha/com/comain.htm

Checklist for information to workers

Do you know:

✓ about the findings of your employer’s risk assessment?
✓ what hazards you are being exposed to?
✓ how you may be affected?
✓ what you have to do to keep yourself and others safe (i.e. how the risks are to be controlled)?
✓ how to check and spot when things are wrong, and to whom you should report any problems?
✓ about the results of any exposure monitoring or health surveillance?
✓ about preventive measures to be taken in case of maintenance work?
✓ about first aid and emergency procedures?

Checklist for good communication between the employer and the workers

✓ Is there a list of hazardous substances used or produced in every workplace?
✓ Is there a safety data sheet readily available for each classified hazardous chemical substance used?
✓ Has the information from the safety data sheet been translated into workplace instructions that give practical information on how to handle substances in the daily routine?
✓ Is each container for a hazardous substance (e.g. vats, bottles, storage tanks, etc.) labelled with the identity of the product and appropriate hazard warnings relating to both the physical hazards (e.g. explosion risk) and health hazards?
✓ Has a risk assessment been carried out and its findings communicated?
✓ Are workers asked regularly about potential health and safety problems?
✓ Has all relevant information, instruction and training on the hazardous substances present in the workplace been provided to workers, including the precautions they should take to protect themselves and the other employees?
✓ Do all employees know:

  ✓ how to make full and proper use of all the control measures provided?
  ✓ to whom they should report any problems and defects with any control measures?
  ✓ what they should do in the event of an accident, incident or emergency involving hazardous substances?