



Commission proposes better workers' protection against cancer-causing chemicals

Brussels, 13 May 2016

Cancer is the first cause of work-related deaths in the EU, accounting for 53% of the total and therefore the single biggest health risk to workers in the European Union

How are workers currently protected under EU legislation?

The EU principles of worker protection from carcinogens are laid out in the over-arching Occupational Safety and Health (OSH) Framework Directive 89/391/EEC and those Directives specifically dealing with chemical risks – notably the Chemical Agents Directive and the Carcinogens and Mutagens Directive (CMD).

Under the OSH framework risks to the safety and health of workers must be eliminated or reduced to a minimum. CMD sets a number of concrete provisions specific to chemical carcinogens.

Employers must identify and assess risks to workers associated with exposure to specific carcinogens and mutagens, and must prevent exposure where risks occur. Where possible, the carcinogenic substance should be substituted with a less-hazardous alternative – otherwise carcinogens must, so far as is technically possible, be manufactured and used in a closed system to prevent exposure of workers. Where this is not possible either, worker exposure must otherwise be reduced as much as can be.

A lack of national Occupational Exposure Limits (OELs) for some carcinogens, and the high levels of others, not only leads to inadequate protection for EU workers but can also have negative consequences for the internal market. It leads to situations, where businesses located in Member States with less stringent levels (where there are no set occupational exposure limit values, or where they are set at a high level, allowing for greater worker exposure) may benefit from an undue competitive advantage. Varied national OELs can create uncertainty regarding appropriate risk management standards.

From a more general perspective, therefore, OELs promote consistency by defining a 'level playing field' for all users and a common objective for employers, workers and enforcement authorities. The proposal therefore leads to a more efficient system of workers' health protection in the single market.

Under the CMD, Member States can adopt a lower (i.e. stricter) national limit than the EU value, consistent with the ultimate objective of the Directive, which is to minimise exposure.

What changes does the Commission propose to the Carcinogens and Mutagens Directive?

Based on input from scientists, employers, workers, Member States' representatives and labour inspectors, the Commission has proposed limit values for 13 of a list of priority chemical agents identified through the consultation process. For the remaining chemical agents there is additional analysis to be done and a proposal for limit values will follow by end 2016.

Table 1. Sectors, types of cancer caused and estimated exposure levels for 13 chemical agents under consideration

| Chemical agents | Proposed OELs | Relevant sectors | Types of cancer caused/other illnesses | No. of exposed workers |
|------------------|-----------------------|---|---|------------------------|
| 1,2-Epoxypropane | 2.4 mg/m ³ | Chemical manufacture; synthetic lubricants, oil field drilling chemicals; polyurethane systems. | Lymphopoietic cancer, haematopoietic cancer, increased leukaemia risk | 485-1,500 |
| 1,3-Butadiene | 2.2 mg/m ³ | Manufacture of refined petroleum products, manufacture of rubber products | Lymphohaema-topoietic cancer | 27,600 |

| | | | | |
|-------------------------------------|--------------------------|---|---|-----------|
| 2-Nitropropane | 18 mg/m ³ | Manufacture of basic chemicals, manufacture of aircraft and spacecraft (downstream use) | Liver tumours | 51,400 |
| Acrylamide | 0.1 mg/m ³ | Manufacture of chemicals and chemical products, education, research and development, other business activities, health and social work, public administration and defence. | Pancreatic cancer | 54,100 |
| Bromoethylene | 4.4 mg/m ³ | Chemicals and allied production; rubber and plastic production; leather and leather production; fabricated metal production for wholesale trade | Liver cancer | n/a |
| Chromium (VI) compounds | 0.025 mg/m ³ | Production and use of chromium-containing pigments, paints and metal (conversion) coatings. In terms of downstream use, chromate compounds, including barium chromate, zinc chromate, and calcium chromate, may be used as basic primers and top coats in the aerospace sector. | Lung cancer and sinonasal cancer | 916,000 |
| Ethylene Oxide | 1,8 mg/m ³ | Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction; Manufacture of food products, textiles, chemicals, chemical products, medical, precision and optical instruments, watches, clocks; Hospital and Industrial sterilization; R&D; Public Administration and Defence; Education; Health and Social Work | Leukaemia | 15,600 |
| Hardwood dusts | 3 mg/m ³ | Wood working industry, furniture manufacture sectors and construction. | Sinonasal and nasopharyngeal cancers | 3,333,000 |
| Hydrazine | 0.013 mg/m ³ | Chemical blowing agents; agricultural pesticides; water treatment | Lung and colorectal cancer | 2,124,000 |
| o-Toluidine | (0.5 mg/m ³) | Manufacture of chemicals, chemical products and man-made fibres; Manufacture of rubber products; Research and development; Public administration and defence; education; health and social work. | Bladder cancer | 5,500 |
| Respirable Crystalline Silica (RCS) | 0.1 mg/m ³ | Mining, glass manufacturing, construction and electricity, gas, steam and hot water supply industries. | Lung cancer, silicosis | 5,300,000 |
| Refractory Ceramic Fibres (RCF) | 0.3 f/ml | Manufacturing (fibre production, finishing, installation, removal, assembly operations, mixing/forming) | Adverse respiratory effects, skin and eye irritation; possibly lung cancers | 10,000 |
| Vinyl Chloride Monomer (VCM) | 2.6 mg/m ³ | Manufacture of chemicals and chemical products (VCM and PVC production) | Angiosarcoma, hepatocellular carcinomas | 15,000 |

Introducing these limit values will provide employers, workers and enforcement bodies with an

objective measure to help to ensure that the general principles of the Directive are complied with. This should contribute to a reduction in exposure to these priority carcinogens with a consequential reduction of workers affected by occupational cancer.

What are the benefits of the proposal?

It is estimated that introduction of the proposed limit values could make it possible to avoid about 100,000 deaths in the forthcoming 50 years. Deaths will be avoided mainly in relation to the following chemical agents: Respirable Crystalline Silica (98,670), Chromium VI (1670) and Refractory Ceramic Fibres (50).

However, the time between exposure to a carcinogen and the onset of the disease can be up to 50 years. The estimation is therefore based on a number of assumptions regarding exposure projections, production methods, and medical knowledge.

What benefits will the proposal bring for workers?

First of all, for workers and their families, suffering and lowered quality of life caused by cancer will be reduced. The proposal also helps avoiding health care costs, lost earnings, and other costs both for the person affected and for the carers. In addition the introduction of proposed limit values would improve legal protection for exposed workers.

What benefits will the proposal bring for businesses?

For businesses, the proposal will reduce costs caused by occupational cancer in terms of productivity, as they avoid losing workers and spend on search and training of new workers.

In addition, EU limit values provide a compliance benchmark, contribute to a 'level playing field' in the form of EU-wide minimum standards of protection and improve clarity regarding how exposure should be controlled in different Member States. This is key when striving towards a deeper and fairer single market.

What benefits will the proposal bring for Member States?

For Member States, the proposal will reduce healthcare costs related to treatment and rehabilitation, as well as decrease expenditure on associated inactivity and early retirement and compensation for recognised occupational diseases. It also reduces administrative and legal costs related to the handling of requests for benefits and dealing with recognized cases.

How have the social partners been consulted?

- Social partners have been consulted through a statutory two-stage consultation. The results of the social partners' consultation have fed into the Commission's preparatory work. This included the input provided by the tripartite Advisory Committee on Safety and Health (ACSH), where the social partners and Member States have given their opinion on the limit values proposed in the current initiative.
- Social partners supported including further so-called process generated substances (PGSs) under the scope of the Directive and revising existing and establishing new OELs in the light of available scientific data.

ANNEX – Existing national OELs and number of workers exposed per MS for RCS, hardwood dust, chromium

Chromium VI

Figure 1 – Chromium VI - Current national OELs vs. proposed OEL

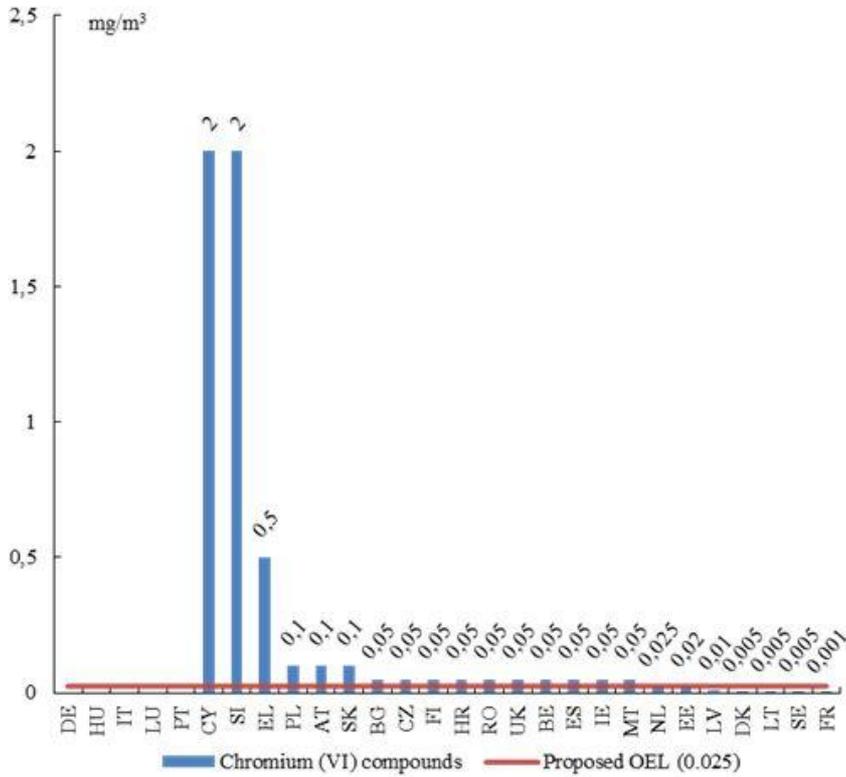
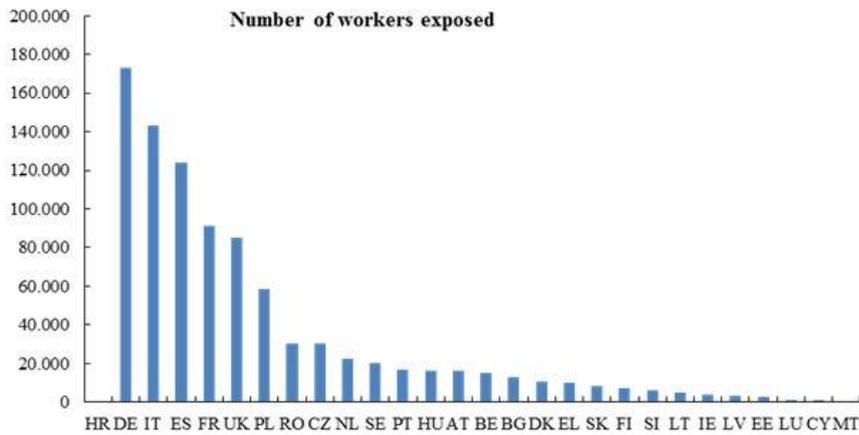


Figure 2 - Chromium VI - Number of exposed workers



Hardwood dust

Figure 3 – Hardwood dust - Current national OELs vs. proposed EU OEL

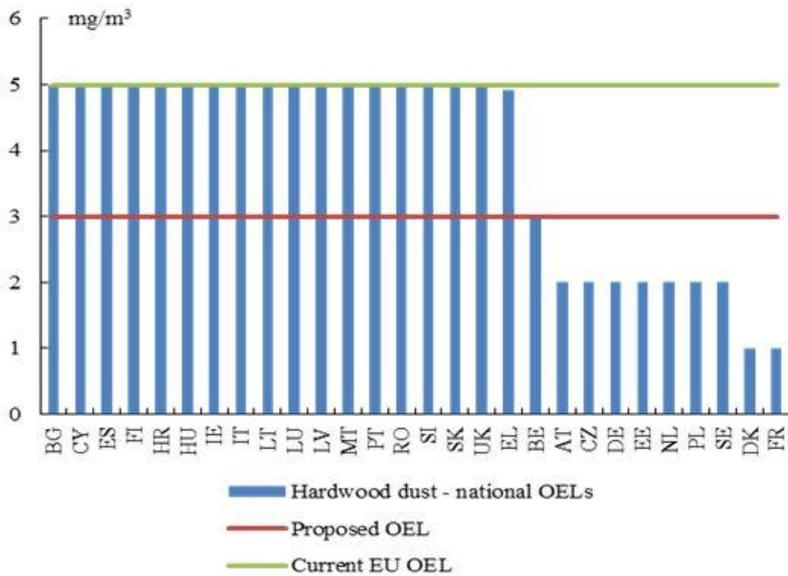


Figure 4 – Hardwood dust - Number of exposed workers



Respirable Crystalline Silica (RCS)

Figure 5 - Respirable Crystalline Silica (RCS) - Current national OELs vs. proposed EU OEL

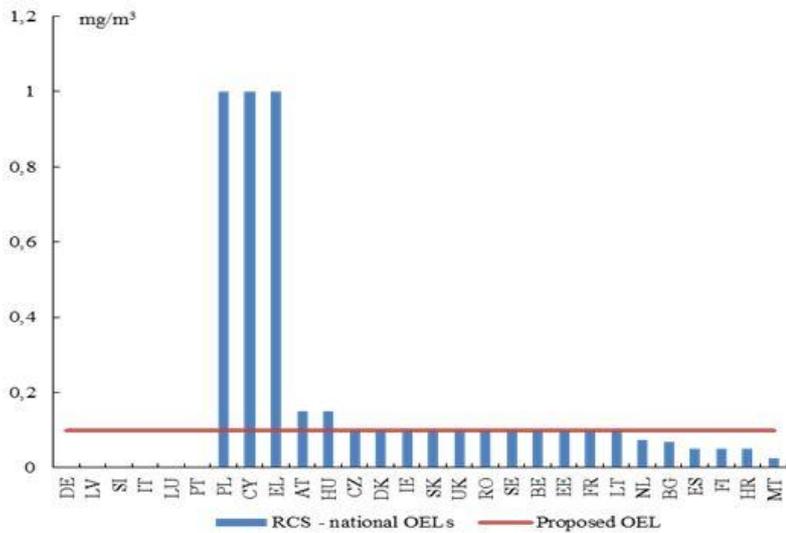
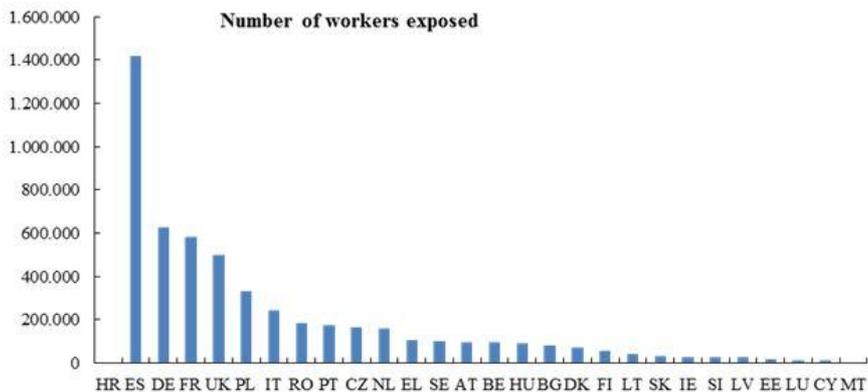


Figure 6 - Respirable Crystalline Silica (RCS) - Number of exposed workers



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