

## Factsheet on workplace carcinogens

### Industries affected

Most of the workers at risk are blue collar workers in a wide range of industries. Workers from the wood and building industry are the most exposed (mainly due to the very high number of people exposed to crystalline silica, asbestos and wood dust). Others work in chemical manufacturing plants, aeronautic, automotive, furniture, etc.... Workers in many different service activities should also benefit from greater protection, including hairdressers, healthcare workers and cleaners.

### Number of workers

At a very conservative estimate, about 10 million workers would be better protected if the ETUC proposals were adopted. Stricter Occupational Exposure Limits (OELs) on many carcinogens would save many more lives, but a certain level of risk would still exist. That is why other measures, such as substitution, closed systems, and minimisation going below the OELs when technically possible, should be adopted. It is important to maintain or strengthen REACH regulations banning different substances from the market or from certain uses.

Many additional health benefits would accrue from greater protection against work cancers. Most of the carcinogenic substances have also other ill health effects. For instance, according to the European Agency for Health and Safety, hairdressing brings a 10-times greater risk of contracting occupational skin diseases than any other profession. In some countries up to 70% of hairdressers suffer from work-related skin damage.

### ETUC demands

- Introducing 50 OELs would covers many more workers. For instance, diesel exhaust constituted a high risk for 3 million workers in 1995, and the number has increased.
- Amending the Directive would cover more workers, more risks, and save many lives. For instance, in Belgium, post-employment health monitoring for workers exposed to wood dust has helped avoid deadly nasal cancers.
- Better gender balance: the 13 substances selected by the Commission relate mainly to male exposures. The ETUC list covers a cytostatic, tamoxifen, and formalde hyde to which women are most exposed (health workers like nurses or cleaners in hospitals).

Substance	Proposed OEL by Comission	ETUC proposal
1,3-butadiene	1 ppm	0,5 ppm
Hardwood dust	3 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>
Respirable Crystalline Silica	0,1 mg/m <sup>3</sup>	< 0,05 mg/m <sup>3</sup>
Refractory Ceramic Fibres	0,3 f/mL	0,1 f/mL

## Specific risks

**Respirable crystalline silica** affects some 5 to 6 million workers; 70% in the building industry, foundries, glass manufacture and mining. Causes lung cancer, silicosis and other pulmonary diseases.

**Hardwood dust** affects some 3 million wood workers e.g. in forestry, furniture and building. Causes sinonasal cancer, respiratory diseases (asthma), skin diseases (dermatitis).

**Hydrazine** pesticide affects more than 2 million workers in agriculture, water treatment. Causes lung and colorectal cancer, and risk to thyroid, liver and reproductive health.

**Chromium VI** affects about 1 million workers, mostly in the metal sector, woodworking, painting (e.g. in aeronautic industry), pigment manufacture. Causes lung, sinonasal cancer, gastrointestinal ulcers, skin diseases, nasal perforations. The proposed OEL is not adequate.

**Acrylamide** affects 50,000-60,000 workers in waste water treatment, paper and pulp, mineral processes. It causes kidney, endometrial, and ovarian cancer.

**Nitropropane** affects some 50,000 workers in inks, adhesives paint and coatings. Causes liver cancer, pulmonary irritation, kidney damage.

**Butadiene** affects about 30,000 workers in the rubber, automotive and plastic industries. Causes haematopoietic cancers (blood and lymph), nervous system and cardiovascular diseases.

**Ethylene oxide** affects around 15,000 workers in cosmetics production, hairdressing and hospitals. It causes leukemia, stomach and pancreatic cancer. It is a neurotoxic, causes lung irritation, sensitisation, reproductive risks.

**Vinyl Chloride Monomer** affects more than 15,000 workers in the plastic industry. Causes liver cancer, damages liver and central nervous system.

**Ceramic fibres** affect about 10,000 workers. Causes lung cancer and other pulmonary diseases.

**O-Toluidine** affects 5000-6000 workers in the rubber and chemical industries and downstream dye users like hairdressers. Causes bladder cancer, central nervous system - depression, skin diseases.

**Epoxypropane** affects 1000-2000 workers in the chemical industry. Causes haematopoietic cancers (blood and lymph), leukaemia, and risks to skin, lungs and fertility.

**Vinyl Bromide** – a flame retardant used in acrylic fibres, carpets and furnishing, affects up to 1000 workers. Causes liver cancer, and liver, kidney and haematological effects.

Sources: IOM research project on the protection of workers; [European Commission](#)