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OEL values for new chemicals in 2017 in Poland

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Statement of the Problem: The aim of the studies is to support enterprises in the implementation of statutory obligations relating to health and safety by providing information on the risks posed by chemical substances on the basis of monographs developed occupational exposure limits. In Poland the system of setting hygienic standards was launched in 1983 by the minister of labor, wages and social affairs and the minister of health and social welfare who appointed the interdepartmental commission for maximum admissible concentrations and intensities for agents harmful to health in the working environment. In Poland in 2017, the OEL values were established for 6 new substances.

Methodology & Theoretical Orientation: The selection of substances to develop monograph of OEL values was taken into account, 3 substances classified as carcinogenic: Phenolphthalein, 2-nitroanisole, N-nitrosodimethylamine. Two active substances of anticancer drugs, i.e. etoposide and fluorouracil were also considered as part of the follow-up work on the development of occupational exposure limits for cytostatics. Considering the need to establish the normative value of 2,3,7,8-tetrachlorodibenzo-p-dioxine for which no OEL has been established yet, but it is a major hygienic problem in plants where chlorine-containing compounds are burned, e.g. in hazardous waste incineration plants.

Findings: On the basis of the available data in the literature on the health and biological effects caused by the selected substances have identified the effects and organs or critical systems of their toxic effects and have assessed the risk to the health of workers who are exposed to them. In the case of cytostatics, setting OELs protects medical staff mainly against the distal effects of exposure.

Conclusion & Significance: Establishing the OEL values for selected chemicals in the work environment will help to effectively manage the risks associated with exposure to them.

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