

Dr. Ewelina Korczowska

Workshop: "Fresh perspective on the risks associated with exposure to cytotoxics"

Occupational exposure of healthcare professionals to cytotoxic drugs is an important issue which has been considered for many decades. It is forty years since Falck et al. reported evidence of mutagenicity in urine samples of nurses handling cytotoxic drugs. The scientific literature on this topic has grown tremendously since then. Over 400 papers on hazardous drugs have now been published in peer-reviewed journals. These reports document how vial contamination, preparation, administration, disposal and other hazardous drugs handling activities, have potentially exposed pharmacists, nurses, physicians, and other healthcare workers to significant workplace levels of these chemicals. The workshop will discuss what has changed in this time, what we have learned and what else needs to be done to improve our understanding of the risks involved.

Monitoring of cytostatics as an efficient tool supporting healthy working environment for pharmacists and health care staff

Presented by Ludek Blaha,
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Cytostatics are among the most potent hazardous medicinal products known to pose various health risks in occupational settings, including genotoxicity-related outcomes such as cancer or reproduction disorders. Proper assessment of indoor contamination (monitoring) allows not only estimate exposures and associated health risks but also serves as an important tool in the management of cytostatic risks. Here were present results of a long term (2008-2022) data collected in pharmacies, hospitals, hospices and retirement homes in Czechia, and recently also in Slovakia. We show several examples how the data from monitoring – if treated and considered properly in the management plan – dramatically improved contamination and resulted in lower risks for personnel. The study covered diverse surface samples in 32 different health care centres and other indoor environments that were analyzed by multitarget LC-MS and ICP-MS for 11 cytostatics. In brief, the major drivers of contamination included “human factor”, i.e. differing routines of pharmacists, custodians, nurses), proper use of decontamination (and disinfection) as well as personnel education. The presentation will discuss possible guidance values (safe limits) building on examples and diverse case studies that might be used as examples of good practice.