OCCUPATIONAL EXPOSURE TO MYCOTOXINS - CURRENT KNOWLEDGE AND PROSPECTS

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Workers in numerous sectors are exposed to organic dust originating from such diverse organic matter as soil, plants, animals, food, and fecal matter. This dust contains lots of different bacteria and fungi and their components such as endotoxins and glucans. Furthermore, some fungi can actively produce secondary metabolites called mycotoxins. Some mycotoxins can have serious human health effects when ingested, but their health effects following inhalation or dermal contact are still insufficiently documented.

Occupational exposure to mycotoxins is supposedly very frequent, but it is rarely reported in the scientific literature. Several recent studies described occupational exposure to the aflatoxin B1 (AFB1) mycotoxin [1-4]. Previously, exposure to mycotoxins was shown in the animal husbandry and food processing sectors, confirming that occupational exposure cannot be negligible [1,5]. However, no guidelines or standard methodologies are available for helping occupational hygienists to consider mycotoxin risk in their occupational health interventions [6]. In this work will be discussed which occupational environments are prone to be contaminated with mycotoxins, what exposure assessment tools can be use and related limitations, exposure characteristics and influencing variables. Aspects to consider for exposure and risk assessment will also be presented and discussed. Additionally, the type of preventive measures that can be applied in the different occupational settings will be presented.

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