

Featured Research Studies

Med Pr. 2008;59(4):333-45.

[Occupational exposure to mycotoxins in various branches of industry]

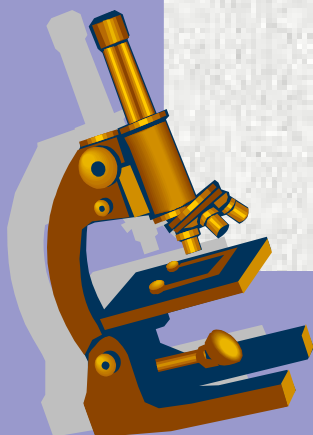
[Article in Polish]

Soroka PM, Cyprowski M, Szadkowska-Stańczyk I.

Zakład Środowiskowych Zagrożeń Zdrowia, Instytut Medycyny Pracy im. prof. J. Nofera, Łódź.

Mycotoxins are a quite numerous group of substances released as metabolites by molds, which badly affect human and animal health. Their impact on organisms resulting from alimentary exposure is well recognized, but the mechanisms by which they exert their health effects after inhalation exposure are still poorly investigated. The aim of this work was to review the literature concerning the outcomes of occupational exposure to mycotoxins present in the work environment. The author discusses the major mycotoxin classes, their chemical structure, some physicochemical properties and biological activity properties. This paper summarizes the results of investigations on the impact of occupational exposure to molds present in the workplace air in various branches of industry. Problems of identifying the mechanism of health effects exerted due inhalation exposure to mycotoxins are also discussed. This review shows that there is lack of good hygiene standards and legislation regulating the presence of these compounds in the workplace air. These is due to insufficient number of analyses aimed at estimating short-term inhalation exposure to mycotoxins and lack of monitoring of long-term exposure and its health effects. The authors concludes that occupational exposure to mycotoxins and their role in the development of pathological changes in the respiratory system require further investigations.

PMID: 19143225 [PubMed - indexed for MEDLINE]



J Health Soc Behav. 2008 Dec;49(4):417-35.

Pollution comes home and gets personal: women's experience of household chemical exposure.

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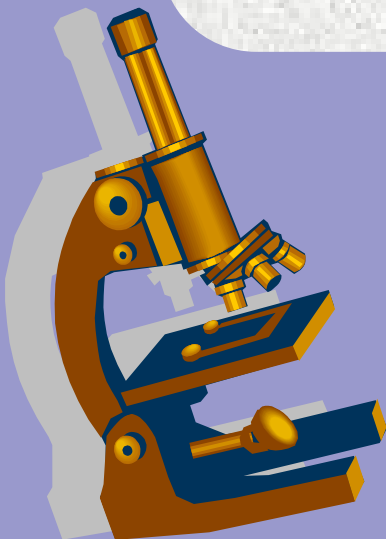
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We report on interviews conducted with participants in a novel study about environmental chemicals in body fluids and household air and dust. Interviews reveal how personal and collective environmental history influence the interpretation of exposure data, and how participants fashion an emergent understanding of environmental health problems from the articulation of science and experience.

To the illness experience literature, we contribute a framework for analyzing a new category of embodied narratives--"exposure experience"--that examines the mediating role of science. We update social scientific knowledge about social responses to toxic chemicals during a period in which science alters public understanding of chemical pollution.

This article is among the first published accounts of participants' responses to learning personal exposure data, research identified as critical to environmental science and public health. Our findings raise the importance of reporting even uncertain science and underscore the value of a community-based reporting strategy

PMID: 19181047 [PubMed - indexed for MEDLINE]



Int J Audiol. 2008 Dec;47(12):770-6.

Amalgam dental fillings and hearing loss.

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In this study we investigated the effects of amalgam dental fillings on auditory thresholds. Participants (n=39) were non-smoking women age 40 to 45. Regression and correlation analyses were performed between auditory thresholds, measured from 0.25 to 16 kHz, and the number/surface area of dental fillings, using the ASHA criteria for ototoxic change as a reference for comparison.

No significant correlation ($p>0.05$) was found between composite (non-amalgam) filling or drilling data and auditory thresholds. However, there was a significant positive linear correlation between amalgam filling data and auditory thresholds at 8, 11.2, 12.5, 14, and 16 kHz. The strongest association ($r=0.587$, $n=39$, $p<.001$, $r(2)=0.345$) was at 14 kHz, where each additional amalgam filling was associated with a 2.4 dB decline in hearing threshold (95% confidence interval [CI], 1.3-3.5 dB).

The results suggest an association between more amalgam fillings and poorer thresholds at higher frequencies, which could contribute to presbycusis in developed countries. This provides further argument for the use of amalgams to be phased out where suitable alternatives exist.

PMID: 19085401 [PubMed - indexed for MEDLINE]

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