

Chemical sensitivity: symptom, syndrome or mechanism for disease?*

Copyright © 1996 Published by Elsevier Science Ireland Ltd.

http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6TCN-412S141-7&_user=10&_rdoc=1&_fmt=&_orig=search&_sort=d&_docanchor=&view=c&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=a8d8c86c2bb46cc9ec114003742d2a38



Claudia S. Miller 

Department of Family Practice, Environmental Occupational Medicine, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284-7794, USA

Available online 28 August 2000.

Abstract


Several different meanings have been attached to the term “chemical sensitivity” by those who use it. Feeling ill from odors is a *symptom* reported by approximately one-third of the population. The *syndrome* of chemical sensitivity, frequently called “Multiple Chemical Sensitivity” or “MCS” has been the subject of three federally sponsored workshops; at least five different case definitions for research on MCS have been proposed. In contrast, the hypothesis that chemical sensitivity may be a *mechanism for disease* posits that a broad spectrum of “recognized” chronic illnesses, ranging from asthma and migraine to depression and chronic fatigue, may be the consequence of environmental chemical exposures. According to this theory, a two-step process occurs: (1) an initial salient exposure event(s) (for example, a one-time, intermittent, or continuous

exposure to pesticides, solvents, or air contaminants in a sick building) interacts with a susceptible individual, causing loss of tolerance for everyday, low level chemical inhalants (car exhaust, fragrances, cleaning agents), as well as for foods, drugs, alcohol, and caffeine; (2) thereafter, such common, formerly well-tolerated substances trigger symptoms, thus perpetuating illness. "Masking" (acclimatization, apposition, and addiction) may hide these exposure-symptom relationships, thus obfuscating the environmental etiology of the illness. Accumulating clinical observations lend credence to a view of chemical sensitivity as an emerging theory of disease causation and underscore the need for its testing in a rational, scientific manner. While chemical sensitivity may be the consequence of chemical exposure, the term "toxicant-induced loss of tolerance" more fully describes the two-step process under scrutiny.

Author Keywords: Chemical sensitivity; Theory for disease; Environmental exposure; Environmental etiology; Toxicant-induced loss of tolerance

Article Outline

[• References](#)

 Corresponding author, Tel.: 210-567-4577; Fax: 210-567-4579.

[*1](#) Presented in part at the Tri-Service Toxicology, US Environmental Protection Agency, and Agency for Toxic Substances and Disease Registry Interagency Conference on Risk Assessment Issues for Sensitive Human Populations, Wright-Patterson Air Force Base, Ohio, April 25–27, 1995.

Sponsored Links

[Tinnitus Treatment](#)

Did you know that Chinese herbs can easily treat Tinnitus?

hnmrc.net

[Hearing Tests Sydney](#)

Do you suffer with hearing loss?

Totalcare Hearing can help you.

www.totalcarehearing.com.au

[Tinnitus- Ringing in Ears](#)

Natural homeopathic relief for

Ringing in ears and tinnitus

www.tinnituswars.com