

# Exposure to gas, dust, fumes ups risk of mite sensitization

February 13 2015

---



(HealthDay)—Occupational exposure to gas, dust, and fumes (GDF) increases the risk of mite sensitization, and is associated with asthma and wheeze in those who are mite-sensitized, according to a study published online Jan. 30 in *Allergy*.

Anders Bjerg, M.D., Ph.D., from the University of Gothenburg in Sweden, and colleagues examined the role of [sensitization](#) in the correlation between GDF and [allergic conditions](#). Data were collected from questionnaires and skin prick tests from a population-based sample of 788 adults from the West Sweden Asthma Study.

The researchers found that GDF exposure correlated with a doubled risk of sensitization to mites, but not other allergens, after adjustment for confounders. The effect of GDF on [asthma](#) was modified by mite

sensitization. GDF correlated with physician-diagnosed asthma and wheeze in mite-sensitized subjects (adjusted odds ratios, 2.9 [95 percent confidence interval, 1.2 to 7.2] and 2.4 [95 percent confidence interval, 1.1 to 5.3], respectively). The corresponding odds ratios were 1.1 (95 percent confidence interval, 0.5 to 2.6) and 0.6 (95 percent confidence interval, 0.3 to 1.3) in non-mite-sensitized subjects. Irrespective of mite sensitization, GDF was independently associated with eczema but not rhinitis.

"These novel findings suggest that components of GDF may act as adjuvants that facilitate sensitization to mites, and that mite-sensitized individuals may be especially susceptible to inhalant occupational exposures," the authors write.

**More information:** [Abstract](#)  
[Full Text \(subscription or payment may be required\)](#)

Copyright © 2015 [HealthDay](#). All rights reserved.

Citation: Exposure to gas, dust, fumes ups risk of mite sensitization (2015, February 13)  
retrieved 29 December 2023 from  
<https://medicalxpress.com/news/2015-02-exposure-gas-fumes-ups-mite.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--