

FRAGRANCE SAFETY CONCERNS

Lynn Tondat Ruggeri, Ph.D. and Laura Costa, Ph.D.

SAFERWORKS

P.O. Box 1227 Hope Valley, RI 02832

401-965-0179

www.saferforyourbaby.com

- Up to 95% of chemicals used in fragrances are synthetic compounds derived from petroleum and coal tar. These include VOCs (volatile organic compounds) such as benzene derivatives, aldehydes, ketones, alcohol denaturants and other known toxins and sensitizers capable or suspected of causing cancer, birth defects, central nervous system disorders and allergic reactions. ¹⁻⁷
- Recent research shows that airborne chemicals, including VOCs, have direct, immediate access to the brain through the nasal passages.^{8,9} Drug companies developing intranasal drugs are required to use strict FDA guidelines to prove safety with full ingredient disclosure¹⁰, while industries that make fragrances (with a 75-95% VOC content) are self-regulated and therefore not required to do any safety testing or to reveal ingredients. ⁵⁻⁷
- A fragrance is typically comprised of 30-500 of the 3,000-5,000 fragrance chemicals currently in use. ⁵⁻⁷ A non-profit organization called Research Institute for Fragrance Materials (RIFM) ¹¹, which the International Fragrance Association (IFRA)¹² and FDA defer to for voluntary safety testing, has tested 1,300 single ingredients but only for safety on skin.⁵⁻⁷ Thus, virtually none of these single or combined ingredients are tested for central nervous system safety despite the fact that many of the individual chemicals in fragrances are known to be neurotoxic and/or carcinogenic. ^{2,5-7}
- Labels such as “unscented,” “fragrance-free,” or “hypo-allergenic” have no legal, safety or regulatory meaning. In fact, such products often contain “masking” fragrances that may not be listed or are labeled as a fragrance (which *is* required by the FDA). These “masking” fragrances have been reported to cause sensitivity reactions in consumers who thought they were buying and using products free of fragrances. ^{5,13-15}
- Example of lack-of-safety, self-regulation and lack-of-enforcement in the fragrance industry: Two ingredients (AETT and musk ambrette) were found to be neurotoxic by independent researchers. However, AETT had been a “safety-tested” ingredient according to RIFM and had already been in use in fragrances for over twenty years. Musk ambrette, which was supposedly voluntarily withdrawn by the industry (and on the “prohibited” list by IFRA), was discovered in fragranced products still being produced and sold 6 to 7 years later. ^{5-7, 13}
- There is no “right-to-know” for fragranced products: Ingredients in fragrances are considered to be “confidential business information” and “trade secrets” and do not have to be revealed to the consumer even when the product has been reported to cause health problems. ^{3,5-7, 14}
- Fragrance is now recognized as a common trigger of asthma attacks, migraine headaches, allergy reactions and sinus problems. ^{5-7, 13,16-18} Fragrances are more common than ever in household and personal care products. Recent health reports indicate that asthma, migraine headaches, allergy and sinus problems have all increased dramatically in the past 10 years and many organizations propose a causal link between this and the increased use of fragranced products. ^{6,13,16-18} Further, fragranced products are now listed as a common source of indoor air and environmental pollution. ^{6,13,19} Even the EPA states that the use of fragrances should be minimized; yet the fragrance industry remains self-regulated and with voluntary standards. ^{20, 6,7}
- Cleaners, laundry products, air fresheners and candles are often more highly fragranced than perfumes and most of the personal care products we put on our skin (e.g., soap, shampoo, lotion) contain fragrance chemicals. People use an average of 12 scented products in a day²¹ and are exposed to hundreds of fragrance chemicals, not only from their own products but from what *is designed to remain* in the air from everyone else in their environment.

Conclusion:

Clearly, the self-regulatory process for fragranced products is seriously flawed. At best, it is inadequate. At worst, it is dangerously misleading. Fragrances are used daily in personal care, cleaning and other household products by millions of women, men and children and while most believe they are using safe products, the truth is that the health risk of fragranced products remains largely untested and uncertain.

References

- 1 Neurotoxins: At home & the workplace (1986) Report by Committee on Science & Technology, U.S. House of Representatives Report 99-827.
- 2 Environmental Defense www.scorecard.org
- 3 Kosta, L.A. (1998) Fragrance and Health. Published by Human Ecology Action League (HEAL).
- 4 Anderson RC et al (1998) Acute toxic effects of fragrance products. Arch Environ Health 53 (2):138-46.
- 5 Fisher, BE (1998) Scents & sensitivity Environ Health Perspect (106)12.
- 6 Bridges, B (2002) Fragrance: Emerging health and environmental concerns. Flavour and Fragrance Journal, 17 (5): 361-371.
- 7 Bridges, B (1999) Fragrances and health. Environ Health Perspect, 107 (7).
- 8 Thorne, RG, et al. (1995) Quantitative analysis of the olfactory pathway for drug delivery to the brain. Brain Res 692 (1-2): 278-282.
- 9 Inhalant Abuse (2002) NIDA (National Institute on Drug Abuse) www.nida.nih.gov
- 10 Medicines are the only chemicals that have to be proven safe. Why? (2002) CCHE www.childenvironment.org
- 11 RIFM- Research Institute for Fragrance Materials (see www.ifraorg.org)
- 12 IFRA International Fragrance Association www.ifraorg.org
- 13 Perfume Hazards Safety & Testing, Health Concerns www.consumeraffairs.com
- 14 Lundquist, P. (2002) Fragrances: What your nose needs to know. Children's Health Environment Coalition, www.checnet.org
- 15 Scheinman, PL (1997) Is it really fragrance-free? Am J Contact Dermat 8(4): 239-242.
- 16 AAAAI American Academy of Allergy Asthma & Immunology www.aaaai.org
- 17 American Lung Association (ALA) offers indoor air tips for people with allergies and asthma (1997) www.lungusa.org
- 18 Shim, C & Williams, M H (1986) Effects of odors in asthma Am J Med , 80 (1): 18-22.
- 19 Common indoor air pollutants (2002) National Institute of Environmental Health Sciences, NIH www.niehs.nih.gov
- 20 EPA , Environmental Protection Agency www.epa.gov
- 21 Fundamentals of cosmetic product safety testing. (1996) Cosmetics and Toiletries, 111(10): 79-86.