Fragrance/perfume seems to be all invasive and difficult to avoid. It is one of the many reasons why those with chemical sensitivity have so much trouble going anywhere.

Fragrance is added to numerous consumer products, some of which maybe unexpected eg foods, beverages and cigarettes, and can explain those difficult to trace exposures. In buildings with a centralised air conditioning system, attempts to create a fragrance free floor or office may go astray due to antibacterials, containing fragrance, being added to the system to combat the spread of bacterial infections. See the ASEHA leaflet - About Fragrances: Did you know., by Dorothy M Bowes.

The Age newspaper in Australia published an article, Hell's smells, on July 9, 2004, by Elizabeth King that highlights the current concerns about fragrance and features an interview with Dr Mark Donohue. The Age Article July 9, 2004

Putting on a good face – the chemistry of cosmetics. Published by Australian Academy of Science. The pursuit of beauty has spawned a massive industry founded on the science of chemistry - the cosmetics industry.

Chemicals in Fragranced and Other Household Products - Searchable Information

The EHPnet Household Products Database (US based): Health & Safety Information on Household Products contains information on many common brand labels, and include MSDS's on some substances. Try entering 'fragrance' into the ingredients keyword search for list of products containing fragrances. Household Products containing Perfumes

The Environmental Working Group website also has a searchable product guide. For information on fragrances, perfumes, colognes select the Cosmetics category and then select fragrance/perfume/cologne. This will provide information on 'Areas of Concern' and lists the top 20 ingredients of concern.

The Environmental Working Group report Skin Deep is a safety assessment of ingredients in personal care products and is worth looking at.
Cosmetics and beauty aids are well known sources of 'severe' exposure for those with chemical sensitivity and it is no wonder considering the complex mixture of substances. But it is not only the chemically sensitive that should be concerned about what's in them and their potential effects on human health. For up to date information go to Toxic chemicals in cosmetics and beauty aids: www.NotTooPretty.org

In order to produce newer and better perfumes, the fragrance industry has endeavored to produce more intense and longer lasting perfumes. The development of longer lasting fragrances means that they can last in the air for up to 6-8 hours and scent from laundry products can last up to weeks. An excellent review on fragrance use by Betty Bridges titled Fragrance: Emerging Health and Environmental Concerns can be found at Fragrance Review

Websites with more specific information on Fragrances

The website Environmental Health News http://www.environmentalhealthnews.org/ is also worth a visit for up to date information on fragrances. A search for fragrances will give a list of articles and a breakdown of the articles By Health Conditions, By Exposure pathway etc.

Looking for Australian based information, try Fragrance and Chemical Sensitivity Support Group Victoria, Australia Support Group

Fragranced Products Information Network http://www.fpinva.org. There is a lot of useful information in this site. You can access a 1992 EPA study on ingredients in fragrances in consumer products at Ingredients in Fragranced Products

Environmental Health Network. http://www.ehnca.org. Environmental Health Network carries EHN's FDA Citizens' Petition 99P-1340, which is still open and receiving comments and documentation. Through analyses, this petition gives people a look at the chemicals behind the benign-sounding word, FRAGRANCE. We are encouraging people from around the world to write to the US FDA; (don't give personal identifying codes) just the story of how perfumes
adversely impact your health and your life.

E-mail FDA Dockets at fdadockets@oc.fda.gov

The importance of a petition is that the comments are recorded and then, we hope, the industry and the US Food and Drug Administration will be hard pressed to continue ignore fragrances as a health issue. Sooner or later, one hopes, the fragrance industry will have to stop claiming their products and ingredients are "safe and wholesome." (Fragrance Materials Association, http://www.fmafragrance.org)

Certainly, whether one is a user or a nonuser, one is not free from danger or injury when using or breathing in perfume chemicals used by others, nor is one sure to be hale, healthy and hearty in the presence of these VOCs (volatile organic compounds), which pollute the air for all, indoors and out . . . and the water downstream, also.

The LEAD Action Group website page  LEAD Action Group has information from an EPA study on the health effects of burning scented candle.

The Indoor Environment of Hospitals and Other Health Care Facilities

Air pollution can be worse indoors than outdoor air. Indoor air pollution has become a major health risk producing nose, eye and throat irritations, headaches etc and exacerbating existing conditions such as asthma and chemical sensitivity. Fragrance chemicals have been found to contribute to indoor air pollution and sick building syndrome (see Fragrance leaflet). It is an ironic situation that in hospitals and other health care facilities the health of the patients can be compromised by the quality of the air. For an excellent overview of the issue of air quality in hospitals and health facilities go to the Health Care Without Harm website
Pesticides, Cleaners, & Fragrances

Another site "Hospital for a healthier environment" also promotes the use of healthier building materials generally, and especially for health care facilities  http://www.h2e-online.org/index.cfm
On the issue of hospitals, for some practical information on hospitalisation and the chemically sensitive go to the article by Dorothy Bowes [Dealing with Hospitalisation and Emergency Surgery when Allergy, Food and Chemical Sensitivity are Complicating Factors. Some points for managing your hospitalisation](http://example.com/article)

### Environmental Issues

Pharmaceuticals and Personal Care Product chemicals are finding their way into the environment and little is known about their effects on non target species, especially aquatic species. The article "Pharmaceuticals and Personal Care Products in the Environment: Agents of Subtle Change?" Daughton and Ternes in the *Environmental Health Perspectives* Supplements Volume 107, Number S6, December 1999 reviews the current literature on this topic. The section on personal care products reveals that:

- Various synthetic musks, used in a broad range of personal care products as scent &/or fixative, have been detected in fish (both fresh & marine), oysters, mussels, river water, sewage-treatment water, breast milk and human lipids. Musks have also been detected in air samples.

- Musks do not easily degrade and are therefore persistent and tend to bioaccumulate just as other bioaccumulative pollutants such as PCBs do.

The Environmental News Service on Nov 4 2004 published an article 'Common Synthetic Fragrances Found to Harm Wildlife, Humans' that referred to a Standford University study that showed that some personal care products in water have an effect on aquatic wildlife even at low concentrations. Synthetic fragrances in soaps and shampoos find their way into water through sewers and drains and wastewater treatment plants are unable to remove them. The researchers concluded that even low levels fragrance chemicals can affect the ability of cells to clear themselves of other substances that could be even more toxic than the fragrances.