

What's your IAQ IQ?

IAQ is an acronym for "indoor air quality." And you can easily evaluate your IAQ IQ by answering these two questions:

- 1) Is indoor air more polluted than outdoor air?
- 2) Do air fresheners have any effect on indoor pollution?

If you answered yes to both questions, congratulations – your IAQ IQ is right up there with the best of them.

The Environmental Protection Agency reports that indoor air is often 2-5 times more polluted than outdoor air.

And according to Anne C. Steinemann, Ph.D. – an environmental engineering professor at the University of Washington – the contents of many air freshener brands may actually INCREASE indoor pollution.

Dr. Steinemann became interested in air fresheners and other household products after hearing numerous reports from people who believed these items made them feel sick.

When she conducted a chemical analysis of three best-selling air fresheners and three laundry products, she says, "I was surprised by both the number and the potential toxicity of the chemicals that were found." To avoid legal issues, Dr. Steinemann didn't reveal any brand names of the products tested.

STUDY RESULTS:

- In six products, Dr. Steinemann found nearly 100 volatile organic compounds (VOCs)
- 10 of the VOCs are regulated as either toxic or hazardous
- Three are classified as carcinogenic hazardous air pollutants, which have no safe exposure level according to the EPA

- One of the VOCs was methyl chloride, linked to nervous system, liver, and kidney damage in animals
- Each of the six products contained at least one of the 10 toxic or hazardous VOCs

None of the product labels listed any of these VOCs. No surprise there because U.S. laws don't require manufacturers of household products to list contents.

Reacting to this study, one toxicologist told the Baltimore Sun: "At the very minimum, we should have a right to know what is in these products."

Gradual accumulation

So what's the real danger in getting an occasional whiff of laundry detergent, shampoo, or air freshener?

In the e-Alert "Something in the Air" (2/14/05), I told you about a UK study in which researchers monitored VOC levels for one year in 170 homes where mothers spent their days at home with children.

STUDY RESULTS:

- In homes where air fresheners were used daily, mothers averaged nearly 10 percent more frequent headaches than mothers in homes where air fresheners were used once a week or less
- In the "daily" homes, mothers had more than 25 percent higher risk of depression compared to mothers in the "once a week" homes
- In the "daily" homes, infants were 32 percent more likely to suffer from diarrhea
- Infants in the "daily" homes had a significantly higher rate of earaches than infants in "once a week" homes

Researchers noted that the daily use of air fresheners and other aerosol products created a gradual accumulation of VOCs.

Dr. Steinemann suggests that consumers avoid air fresheners and choose fragrance-free products. But beware – some manufacturers simply use a masking fragrance to neutralize the aroma of scented products.