Media Release

Date: 24.10.2016



Fragranced products: risks for people and profits?

A University of Melbourne researcher has found that over one-third of Americans report health problems—from asthma attacks to migraine headaches—when exposed to common fragranced consumer products such as air fresheners, cleaning supplies, laundry products, scented candles, cologne, and personal care products.

The study also found that fragranced products may affect profits, with more than 20% of respondents entering a business, but leaving as quickly as possible if they smell air fresheners or some fragranced product. More than twice as many customers would choose hotels and airplanes without fragranced air than with fragranced air.

In the workplace, over 15% of the population lost workdays or a job due to fragranced product exposure. Over 50% of Americans surveyed would prefer fragrance-free workplaces. And over 50% would prefer that health care facilities and professionals were fragrance-free.

The research was conducted by Professor Anne Steinemann, from the University of Melbourne School of Engineering, who is a world expert on environmental pollutants, air quality, and health effects.

Professor Steinemann conducted a nationally representative population survey in the United States, using a random sample of 1,136 adults from a large web-based panel held by Survey Sampling International (SSI).

The results are published in the international journal *Air Quality*, *Atmosphere & Health*.

When exposed to fragranced products, 34.7% of Americans suffer adverse health effects, such as breathing difficulties, headaches, dizziness, rashes, congestion, seizures, nausea, and a range of other physical problems. For half of these individuals, effects are potentially disabling, as defined by the Americans with Disabilities Act.

"This is a huge problem; it's an epidemic," says Professor Steinemann.

Fragranced products are pervasive in society, and over 99% of Americans are regularly exposed to fragranced products from their own use or others' use. Reports of adverse health effects were as frequent and wide-ranging across all types of fragranced products.

"Basically, if it contained a fragrance, it posed problems for people," Professor Steinemann said.

Professor Steinemann is especially concerned with involuntary exposure to fragranced products, or what she calls "secondhand scents."

She found over 20% of the population suffer health problems around air fresheners or deodorizers, and over 17% can't use public restrooms that have air fresheners. In addition, over 14% of the population wouldn't wash their hands with soap if it was fragranced.

Media Release

Date: 24.10.2016



Over 12% of the population experience health problems from the scent of laundry products vented outdoors, over 19% from being in a room cleaned with scented products, and over 23% from being near someone wearing a fragranced product.

More generally, over 22% of Americans surveyed can't go somewhere because exposure to a fragranced product would make them sick.

"These findings have enormous implications for businesses, workplaces, care facilities, schools, homes, and other private and public places," said Professor Steinemann. For instance, a growing number of lawsuits under the Americans with Disabilities Act concern involuntary and disabling exposure to fragranced products.

Professor Steinemann's earlier research found that fragranced products—even those called green, natural, and organic—emitted hazardous air pollutants. However, fragranced consumer products sold in the US (and other countries) are not required to list all ingredients on their labels or material safety data sheets. Nearly two-thirds of the population surveyed were not aware of this lack of disclosure, and would not continue to use a fragranced product if they knew it emitted hazardous air pollutants.

Professor Steinemann's research continues to investigate why fragranced product emissions are associated with such a range of adverse and serious health effects.

In the meantime, for solutions, Professor Steinemann suggests using products that do not contain any fragrance (including masking fragrance, which unscented products may contain). She also recommends fragrance-free policies within buildings and other places.

"It's a relatively simple and cost-effective way to reduce risks and improve air quality and health," she explains.

Professor Steinemann has also completed a survey of the Australian population, with results expected to be published soon. "The numbers are similarly striking," she said.

Media Release

Date: 24.10.2016



Additional Information:

- Fragranced consumer products included one or more of the following: (a) Air fresheners and deodorizers (e.g., sprays, solids, oils, disks); (b) Personal care products (e.g., soaps, hand sanitizer, lotions, deodorant, sunscreen, shampoos); (c) Cleaning supplies (e.g., all-purpose cleaners, disinfectants, and dishwashing soap); (d) Laundry products (e.g., detergents, fabric softeners, dryer sheets); (e) Household products (e.g., scented candles, toilet paper, trash bags, baby products); (f) Fragrance (e.g., perfume, cologne, after-shave), and (g) Other.
- Health effects included one or more of the following (with percentage of the population affected): (a) Migraine headaches (15.7%); (b) Asthma attacks (8.0%); (c) Neurological problems (7.2%), e.g., dizziness, seizures, head pain, fainting, loss of coordination; (d) Respiratory problems (18.6%), e.g., difficulty breathing, coughing, shortness of breath; (e) Skin problems (10.6%), e.g., rashes, hives, red skin, tingling skin, dermatitis; (f) Cognitive problems (5.8%), e.g., difficulties thinking, concentrating, or remembering; (g) Mucosal symptoms (16.2%), e.g., watery or red eyes, nasal congestion, sneezing; (h) Immune system problems (4.0%), e.g., swollen lymph glands, fever, fatigue; (i) Gastrointestinal problems (5.5%), e.g., nausea, bloating, cramping, diarrhea; (j) Cardiovascular problems (4.4%), e.g., fast or irregular heartbeat, jitteriness, chest discomfort; (k) Musculoskeletal problems (3.8%), e.g., muscle or joint pain, cramps, weakness; and (l) Other health problems (1.7%).
- Fragranced consumer products are exempt from full disclosure of ingredients to the public.
 For air fresheners, cleaning supplies, laundry products, and other consumer products, labels
 are not required to list all ingredients, or the presence of a fragrance in the product. For
 personal care products and cosmetics, labels are required to list ingredients, except the
 general term "fragrance" may be used instead of listing the individual ingredients in the
 fragrance. For all products, material safety data sheets are not required to list all ingredients.
 Fragrance ingredients are exempt from full disclosure in any product, not only in the U.S. but
 also internationally.

The full article is available, free of charge

on Dr. Steinemann's website:

http://www.drsteinemann.com/publications.html (top article)

or on the journal website:

http://dx.doi.org/10.1007/s11869-016-0442-z

Professor Steinemann is available for interview. For more information, please contact Annie Rahilly (Media Office): +61 3 9035 5380; +61 3 0432 758 734 arahilly@unimelb.edu.au

Professor Anne Steinemann: +61 3 8344 5001 anne.steinemann@unimelb.edu.au