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Summary

Research Project: Accessible Indoor Air in the Built Environment

- **Identifying barriers to an accessible indoor air**

Scent-free policies:
Measuring Effectiveness and identifying barriers to implementation: A Mixed-Methods Approach

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The quantitative component of this research was presented by Adrianna Trifunovski of ASEQ-EHAQ, who presented findings from a comprehensive study assessing the impact of scent-free policies on indoor air quality (IAQ) across 34 buildings in six Canadian provinces. The research utilized a mixed-methods approach, combining quantitative IAQ measurements with qualitative surveys to evaluate differences between scent-free and non-scent-free environments. Results indicated that scent-free spaces consistently had significantly lower levels of total volatile organic compounds (TVOCs) and other hazardous airborne pollutants, including formaldehyde and benzene. These findings suggest that scent-free policies can be a powerful tool in reducing harmful indoor pollutants, particularly for individuals with underlying health conditions such as asthma or Multiple Chemical Sensitivity (MCS).

Despite these promising results, the study revealed notable implementation gaps. Although many buildings claimed to be scent-free, survey responses highlighted a lack of formal staff training, inadequate monitoring, and continued use of fragranced products. These gaps undermined the effectiveness of the policies and contributed to lingering chemical exposures. Even so-called "eco-friendly" products were found to emit hazardous VOCs at levels comparable to conventional cleaners, raising concerns about greenwashing and a lack of transparency in product labelling. The study emphasized that policy effectiveness depends heavily on enforcement, staff education, and the selection of products with truly minimal emissions.

The qualitative component of the study, presented by Nene Diallo, examined attitudinal and cultural barriers to policy compliance. Through focus groups with individuals with disabilities, the research identified common misconceptions, such as associating scent with cleanliness or assuming that synthetic and natural fragrances are interchangeable. These misconceptions often led to stigma, skepticism, and defensiveness, which undermined scent-free initiatives and contributed to persistent exposure to certain chemicals. Participants described experiences of being dismissed, misunderstood, or stigmatized when reacting to scented products, reinforcing the need for public education on Multiple Chemical Sensitivity(MCS).

Ultimately, the presentation underscored that indoor air quality is not just a technical or environmental concern—it is a deeply human and social issue. Scent-free policies are most effective when implemented alongside efforts to shift public perceptions, improve product labelling, and empower building occupants through education. The study concluded that inclusive indoor environments require both structural interventions and cultural change. Without meaningful enforcement and a collective understanding of MCS, well-intentioned policies may fall short, perpetuating exposure risks and undermining accessibility for vulnerable populations.

Citations

American Lung Association. (2023). *Ventilation*. https://www.lung.org/clean-air/indoor-air/protecting-from-air-pollution/ventilation

Bhoonah, R., Mendez, M., & Maury-Micolier, A. (2024). Human health impacts and indoor chemical reactions of vocs from cleaning products and occupants. *Atmospheric Environment*, *338*, 120846. https://doi.org/10.1016/j.atmosenv.2024.120846

Salonen, H., Salthammer, T., Castagnoli, E., Täubel, M., & Morawska, L. (2024). Cleaning products: Their chemistry, effects on indoor air quality, and implications for human health. Environment International, 190, 108836. https://doi.org/10.1016/j.envint.2024.108836

Steinemann, A. (2016). Fragranced consumer products: Exposures and effects from emissions. Air Quality, Atmosphere & Health, 9(8), 861–866. https://doi.org/10.1007/s11869-016-0442-z
Steinemann, A. (2017). Health and societal effects from exposure to fragranced consumer products. Preventive Medicine Reports, 5, 45–47. https://doi.org/10.1016/j.pmedr.2016.11.011

Steinemann A. (2018). National Prevalence and Effects of Multiple Chemical Sensitivities. *Journal of occupational and environmental medicine*, *60*(3), e152–e156. https://doi.org/10.1097/JOM.0000000000001272

U.S. Environmental Protection Agency. (2023, October 12). *Research on health effects from air pollution*. https://www.epa.gov/air-research/research-health-effects-air-pollution

World Health Organization. (2021, September 22). *WHO global air quality guidelines*. https://www.who.int/news-room/questions-and-answers/item/who-global-air-quality-guidelines