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ASEQ – EHAQ

Association pour la santé environnementale du Québec
Environmental Health Association of Quebec

ACCESSIBLE INDOOR AIR IN THE BUILT ENVIRONMENT

EXECUTIVE SUMMARY

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Accessibility Standards Canada

Canada

EXECUTIVE SUMMARY

KEY MESSAGES

- Fragrance-free policies are linked to lower levels of indoor air pollutants
- The quality of indoor air can determine whether people can safely access and use buildings and services
- Products used indoors can release chemicals into the air
- How a policy is put into practice determines how well it works

BACKGROUND AND CONTEXT

Indoor air quality (IAQ) means the quality of the air inside buildings. It can affect people's health by provoking symptoms, and therefore affect their ability to access and use indoor spaces.

People spend most of their time indoors. Because of this, the air inside buildings can have a major effect on health. Indoor air can contain pollutants, including volatile organic compounds (VOCs). VOCs are chemicals released from products, building materials, and everyday activities.

For some people, these chemicals can cause health problems. This includes people living with multiple chemical sensitivity (MCS), asthma, and migraines. Poor indoor air can make it harder for them to access workplaces, healthcare services, housing, and public spaces.

Reports from the Association pour la santé environnementale du Québec – Environmental Health Association of Québec (ASEQ-EHAQ) show that poor indoor air can have serious effects. These effects can include losing a job, difficulty finding or keeping housing, and impacts on mental health.

More people are recognizing that indoor air quality is important for public health. However, there are still gaps in Canadian regulations. There is also limited information about whether fragrance-free policies improve indoor air quality and make spaces more accessible.

OBJECTIVES

This study aimed to:

- Find out whether fragrance-free policies reduce indoor air pollutants.
- Identify the main factors that affect indoor air quality.
- Understand how indoor air quality and fragrance-free policies affect people who use buildings.
- Document barriers that make it difficult for people to access and use indoor spaces safely.
- Provide information to support future accessibility standards and public policies.

METHODS

This study combined indoor air testing with information shared by people about their experiences with indoor air quality. The study included:

- Indoor air testing: 1,156 air samples collected from 34 buildings in 7 provinces. The testing measured several common indoor air pollutants.
- Product testing: 15 commonly used cleaning products were tested, including fragranced, fragrance-free, and environmentally preferred products.
- Review of fragrance-free policies: The study examined how fragrance-free policies were put in place and managed in different workplaces.
- Surveys about indoor air and comfort: People were asked about their experiences with indoor air quality and comfort in different office spaces.
- Building surveys: Information was collected about building features to identify factors linked to lower levels of indoor air pollutants.
- Focus groups: Ten focus groups were held with 60 participants living with chronic conditions, including multiple chemical sensitivity (MCS), asthma, migraines, dermatitis, autism, and allergies.

DATA ANALYSIS

The study reviewed information collected through indoor air testing, building surveys, and focus groups.

The indoor air and building information helped identify factors that may affect indoor air quality. The focus group discussions helped identify common experiences, barriers, impacts, and possible solutions related to indoor air quality.

KEY FINDINGS

1. FRAGRANCE-FREE POLICIES WERE LINKED TO BETTER INDOOR AIR

Buildings with fragrance-free policies generally had lower levels of indoor air pollutants. Buildings without these policies had between 2 and 7 times more pollutants in the air.

2. INDOOR AIR QUALITY AFFECTS ACCESSIBILITY

Poor indoor air quality was identified as a barrier to accessibility. More than half of focus group participants said it had a major impact on important parts of their lives, including work, healthcare, and education.

3. EVERYDAY PRODUCTS CAN RELEASE HARMFUL CHEMICALS

Testing found 190 chemicals released from fragranced products, including some known to be harmful. Only about 5% of these chemicals were listed on product labels. Some fragrance-free products also released harmful chemicals. On average, each product released between 1 and 8 chemicals that can affect health.

4. HOW A FRAGRANCE-FREE POLICY IS PUT IN PLACE AFFECTS HOW WELL IT WORKS

Having a fragrance-free policy alone was not enough to improve indoor air quality.

Buildings that clearly communicated their policies, provided training, monitored compliance, and enforced the policy had lower levels of pollutants, fewer reported health impacts, and better ratings of indoor air quality from building users.

Poorly implemented policies were less effective, including in healthcare settings.

5. BUILDING FEATURES CAN AFFECT INDOOR AIR QUALITY

Indoor air quality was affected by several factors, including:

- Ventilation
- The number of people using a space
- Room size
- Temperature and humidity
- Building age

Ventilation can help reduce pollutant levels indoors, but it does not stop pollutants from being released from the source, or where they are used. In some cases, it may move pollutants to other parts of a building or into the outdoor environment.

IMPLICATIONS

Indoor air quality should be considered when developing accessibility standards.

The study identified several ways to improve indoor air quality and accessibility:

- Use fragrance-free, lowest-VOC emission and least toxic products to reduce pollutants at their source.
- Adopt fragrance-free policies and ensure they are clearly communicated, monitored, and enforced.
- Improve ventilation systems while avoiding the spread of pollutants to other areas.
- Require full disclosure of product ingredients on the label, so people can make informed choices.
- Regularly monitor indoor air quality and check that policies are being followed.

CONCLUSION

This study shows that fragrance-free policies, along with certain building features, can improve indoor air quality and make indoor spaces more accessible.

However, many barriers to clean and accessible indoor air remain. To improve accessibility, voluntary guidelines alone are not enough. Clear standards and effective actions are needed. Achieving this will require collaboration among governments, organizations, employers, building managers, and people with lived experience.

RECOMMENDATIONS AT A GLANCE

Recommendation	Priority	Actor
Require fragrance-free practices and the use of products that release the fewest chemicals and pose the lowest health risks in accessibility standards under the Accessible Canada Act. Standards should clearly explain how these requirements should be implemented and monitored.	Critical	Federal Government
Include fragrance-free requirements and the use of eco-certified, lowest-emission, and least-toxic products in accessibility standards developed under the Accessible Canada Act. Standards should include clear guidance on how these requirements are implemented, monitored, and enforced.	Critical	Building Operators / Government
Set clear and enforceable Canadian limits for indoor air pollutants such as total VOCs (TVOCs) and VOCs in workplaces and public buildings.	High	Health Canada
Require all ingredients in consumer products to be listed on product labels, including fragrance ingredients that are currently allowed to be hidden under the term “fragrance.”	High	Health Canada / Industry
Provide training for physicians, building managers, and human resources professionals on indoor air quality and health conditions that can be affected by poor indoor air, including Multiple Chemical Sensitivity (MCS).	High	Federal / Provincial Health
Ensure that Multiple Chemical Sensitivity (MCS) and other disabilities affected by poor indoor air quality are consistently recognized and accommodated in workplaces, services, housing, and public spaces, consistent with protections provided under the Canadian Human Rights Act.	High	CHRC / Provincial Authorities
Develop accessible housing standards that include indoor air quality requirements. These standards should promote fragrance-free environments, the use of lowest-emission and least-toxic building materials and products, effective ventilation, and measures to prevent harmful chemical exposures in supportive housing, subsidized housing, long-term care facilities, and multi-unit residential buildings.	Critical	Health Canada / CCOHS

Table ES-1 summarizes the study's recommendations, organized by priority level and the stakeholder groups responsible for implementation. Recommendations address accessibility standards, indoor air quality policies, product transparency, education and training, disability recognition and accommodation, and

accessible housing. Responsible actors include governments, standards bodies, regulators, employers, building managers, healthcare professionals, and housing providers.

This project adds to the growing body of accessibility research in Canada. Information about this and other funded projects is available through Accessibility Standards Canada's Centre of Expertise, which supports research, knowledge sharing, and the development of accessibility standards across Canada.