

PART D: RECOMMENDATIONS

Introduction

This section of the report provides recommendations stemming from Parts A, B and C. It outlines the research team's identification of the key issues and most promising paths forward.

D1. Advocacy

Public policy related to the indoor environment is diverse and complex due to the multi-dimensional nature and persistence of buildings. A complex distribution of authority between federal and provincial levels of government has, with the exception of workplace occupational health and safety, resulted in little or no legislation targeted at residential, commercial or institutional indoor environments.

D1.1 Encourage Health Canada in Taking a Leadership Role at the National Level

The City of Toronto should encourage Health Canada to take a leadership role for coordinating Federal, Provincial and related Municipal activities related to the indoor environment. There are a number of reasons for this recommendation. First, Health Canada has the legislative authority (e.g. Hazardous Products Act, Pest Control Products Act, Tobacco Act, Exposure Guidelines for Indoor Air Quality and the Canadian Environmental Protection Act) to take action. Second, Health Canada has previously shown leadership around the issue, by chairing Federal-Provincial Working Groups on indoor air quality, producing educational guides and funding research in the area of indoor environmental health (Pollution Probe, AHIE, 2000). Coordinated activities might include: population health research on indoor exposures/impacts on human health in Toronto, partnerships on public education and related communication activities, and public policy interventions.

D1.2 Proactively Determine the City's Jurisdiction and Role(s)

While the City of Toronto does not have the constitutional authority to regulate product constituents, indoor exposure guidelines or building material emission standards, it does and has intervened to protect public health within the indoor environment. The City is regarded as a leader on issues such as smoking in public places for example. A similar weight-of-evidence-based approach regarding other high priority indoor pollutants could have demonstrable impacts on public health.

The effect of these pollutants contributes to the overall burden of illness in Toronto and, as such, the City has a role to play in influencing individuals to act in ways that reduce that burden. Although individuals can seek specific medical help for their conditions—which is not the mandate of Toronto Public Health—

there are a number of arguments in favor of the City's involvement in Indoor air issues, including:

- Helping individuals make healthier decisions for themselves, their families and their wider community;
- Reducing the spread of common allergens to public environments (e.g., public transit, schools and office buildings); and
- Reducing preventable illness, and associated health care and productivity costs.

Further investigation is warranted into the City's jurisdiction and role(s) in this area.

D2. Continued Monitoring

We recommend that the City monitor and further research the substances and other identified in Section A4. Where appropriate, the City could collaborate with other interested parties such as Sunnybrook & Women's College Hospital, Environmental Unit, the Centre for Sustainable Transportation, and the Healthy Indoors partnership. These include:

- Hypersensitive Individuals
- indoor air quality inside transportation vehicles
- PBDEs
- Phthalates
- Perfumes and Scents

D3. Data Collection on the Relative Health and Productivity Burden of the Priority Contaminants

The lack of local data on indoor contaminant levels impedes a more thorough analysis of the relative cost burden in Toronto from each of the substances in this report. Further work in this area is warranted. Where appropriate, the City could collaborate with other interested parties such as the Ontario Workplace Safety and Insurance Board.

D4. Over-Arching Strategy: Reduce Pollution at Source

Our recommendations regarding education and outreach follow the widely held view that the first line of remediation should always be source reduction where practical, followed by ventilation where necessary, and then filtration as a last

resort. We also place a high priority on proper identification of associated health problems.

We propose a strategy that will not only change short term behaviours, but will also lower the barriers to achieving better indoor air quality and create healthier buildings for the long term – one based on the proven approaches of social marketing and market transformation.

While many of our recommendations involve engaging external stakeholders, Toronto Public Health would also benefit from working across programs in public health and with those from other departments, in order effectively promote better indoor air quality. What follows are some of the more promising approaches for doing so:

- Engage the staff who handle complaints as ambassadors for relevant outreach programs/materials;
- Engage other city departments and community organizations through consultations or by forming a working group on indoor health, to coordinate actions;
- Provide information to targeted audiences through the City's building permit process; and
- Target audiences based on issues that would have an impact on that group.

D5. General Outreach

The following are some recommended topics for general outreach.

Combustion Appliances: Combustion appliances, by definition, burn fuel. The gasses formed during burning – particularly during incomplete combustion – are high priority contaminants. The City could provide ongoing public campaigns during appropriate seasons to encourage proper inspection, adjustment and repair of combustion appliances, and to promote detection devices. It could provide additional information during periods of increased risk, such as anticipated cold spells and snow or ice storms. These initiatives could be integrated into other campaigns already being managed and/or funded by the City and its partners at these times.

Housekeeping Issues: The City could investigate the benefit of a campaign focused on housekeeping issues, with a view to preventing and alleviate illnesses associated with mould, indoor allergens and particles (all high priority contaminants).

Asthma and Allergies: Another promising campaign topic is asthma and allergy prevention and control. Ontario children with asthma contributed to

approximately one-third of the total OHIP expenditures of the general population (To et al, 2004).

Lost Productivity: Productivity loss is one of the greatest costs of poor air quality (CARB, 2004). Because exposures to poor indoor air quality occur in offices as well as homes, offices are another important intervention point. Recommendations for offices, include:

- Campaigns focused on asthma, allergies, and accommodating those who are particularly sensitive to environmental contaminants; and
- Tie-ins with programs that fund or otherwise target energy efficiency upgrades / renovations for older buildings, to inform owners and contractors about asbestos and lead risks and procedures.