



The mission of OPHA is to provide leadership on issues affecting the public's health and to strengthen the impact of people who are active in public and community health throughout Ontario.

**Ontario Public Health Association**  
l'Association pour la santé publique de l'Ontario  
Established/Établi 1949

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Association of Public Health Epidemiologists in Ontario (APHEO)

Association of Supervisors of Public Health Inspectors of Ontario (ASPHIO)

Canadian Institute of Public Health Inspectors - Ontario Branch (CIPHI-O)

Community Health Nurses' Initiatives Group (RNAO)

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Ontario Association of Public Health Dentistry (OAPHD)

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Ontario Dietitians in Public Health (ODPH)

Ontario Public Health Libraries Association (OPHLA)

**Charitable Registration**  
Number 11924 8771 RR0001

December 9<sup>th</sup>, 2022

Building and Development Branch  
Ministry of Municipal Affairs and Housing  
College Park 12th Floor, 777 Bay St, Toronto, ON M7A 2J3

**RE: ORR 22-MMAH016 – Proposed Building Code Changes to Support More Homes Built Faster: Ontario's Housing Supply Action Plan: 2022-2023 (Phase 3 - Fall 2022 Consultation for the Next Edition of Ontario's Building Code)**

Thank you for the opportunity to comment on proposed changes to the Ontario Building Code (O. Reg. 332/12) as outlined in ORR 22 - MMAH016 and as related to Bill 23, the proposed More Homes Built Faster Act.

As noted in our November 16<sup>th</sup>, 2022, submission to the Legislative Assembly of Ontario, Standing Committee on Heritage, Infrastructure and Cultural Policy on Bill 23, the Ontario Public Health Association (OPHA) fully supports the need for Ontario to find more affordable housing opportunities for its residents and create healthy, equitable and climate-resilient communities. At the same time, it is vital that these processes, including legislative changes to the Ontario Building Code, are undertaken in a manner that reduces the risk of inadvertent harms and inequities to the health and climate resiliency of communities.

As noted in OPHA's March 13<sup>th</sup>, 2022, submission to ERO 019-4974: *Proposed Changes for the Next Edition of Ontario's Building Code (Winter Consultation)*, building standards and building energy efficiency are closely linked to a number of health risk factors, health inequities, and population health outcomes including: indoor air quality, thermal comfort, climate-resiliency, exposure to hazardous substances, housing conditions, housing affordability, and energy poverty.

**OPHA supports updates to the Ontario Building Code that prioritizes health and safety and that recognizes the need to incorporate climate change science and regional climate forecasts when establishing building code requirements.** Building design and construction that reduces exposure to indoor air and water contaminants and hazards, home energy efficiency standards that reduce energy consumption, and climate-resilient building features that provide protection from extreme weather events including flooding and tornadoes, all help to improve indoor environmental

conditions (air and water quality), reduce thermal stress for occupants, increase climate-resiliency, reduce adverse health impacts and decrease inequities. Children, elderly people and other vulnerable populations are at greatest risk of adverse effects from unsafe and unhealthy indoor environmental conditions.

**OPHA supports Change Number: B-07-06-03 that would amend O. Reg. 332/12 article 7.6.5.3. to include hot water temperature control devices for childcare centres.** As noted in the rationale document, current provisions in O.Reg. 332/12 do not include a maximum hot water temperature within childcare centres which may lead to burn injuries to children; and “the proposed change will provide increased protection against hot water scalding of children by limiting hot water temperature supply to bathtubs, showers or hand basins within childcare centres.”<sup>i</sup>

**OPHA is concerned that Change Number: B-09-13-01 that would amend O. Reg. 332/12 does not go far enough to reduce radon exposure risk, nor does it harmonize the requirements for soil gas control in the Ontario’s Building Code with the National Building Code.** The proposed article 9.13.4.1(2) would only require new construction to comply with MMAH Supplementary Standard SB-9 Requirements for Soil Gas Control in “designated areas referenced in Article 9.1.1.7. [of O. Reg. 332/12] and other areas of the province where methane or radon gases are known to be a problem”, with remaining areas required to “resist the leakage of soil gas” in accordance with the SB-9.<sup>ii</sup>

**OPHA urges the Government of Ontario to require full compliance with SB-9 Requirements for Soil Gas Control in all areas across the province, not just “designated areas” as referenced in Article 9.1.1.7 of O. Reg. 332/12.** According to the Government of Canada’s report on Radon Control Options for New Construction in Low-Rise Residential Buildings: Annex B- Radon Reduction System: Information for Builders and Building Officials<sup>iii</sup> “... there are no areas of Canada that are radon free. The level of radon in a completed home cannot be predicted,...” and “the model National Building Code and many provincial and territorial codes address the need to mitigate potentially high radon levels by requiring a rough-in for future radon reduction in all new homes” with the minimum level of protection being “rough-in for active soil depressurization” to facilitate future addition of a full passive or active system if the home tests high after occupancy.

Radon is the number one cause of lung cancer in non-smokers, and responsible for 16% of Canadian deaths from lung cancer annually<sup>iv</sup>. The only way to know how much radon is in the home is to test for it. While there is no regulation that governs an acceptable level of radon in Canadian homes, with Health Canada acknowledging that any level of radon carries a health risk, the Government of Canada has adopted guidelines for remedial action in existing buildings with the recommendation that “the construction of new dwellings should employ techniques that will minimize radon entry and will facilitate post-construction radon removal, should this subsequently prove necessary.”<sup>v</sup>

**OPHA does not support the change to B-09-13-01 that would amend O. Reg. 332/12 by allowing an exception for soil gas control measures for buildings occupied for a few hours a day (A-9.13.4.2(6)). The rationale for this proposed change, suggesting that “Health Canada recommends installing a means for the future removal of radon in buildings that are occupied by persons for more than 4 hours per day” is a misinterpretation of Health Canada’s advice.** Health Canada’s recommendation for radon testing for

homeowners is that *“the detector is placed in the lowest level of the home where homeowners spend a minimum of 4 hours per day”*. This does not equate to recommendations for radon mitigation measures for new construction. There is no safe level of radon. The body of scientific evidence reveals that the risk of lung cancer increases proportionally with increasing radon exposure. Health Canada recommends that new construction should both minimize radon entry and facilitate future radon mitigation measures. Health Canada recommends that these measures be enacted through building regulations and building codes, a stance that is consistent with international practice and supported by recent research.

OPHA does not agree with the statement in the B-0913-01, Article A-9.13.4.2(6) that *“Addressing a radon problem in such buildings in the future, should that become necessary, can also be achieved by providing a means for increased ventilation at times when these buildings are occupied.”* This reactive approach does not align with expert guidance, nor does it reflect the statement that the B-0913-01 document that these proposed changes have the benefit of *“enhancing public health protection from radon in addition to supporting harmonization.”* Many more lung cancer deaths can be prevented by intervening during new construction, rather than in existing homes.

OPHA also recommends that **Change Number: B-09-13-01 that would amend the soil gas control articles of O. Reg. 332/12 include a clause to** require a post-construction radon test for all new construction. This measure would help ensure the impact and effectiveness of radon control measures in reducing exposure to radon<sup>vi</sup>.

**OPHA urges the Government of Ontario to consult with Health Canada experts on radiation safety before finalizing changes to the Ontario Building Code relating to soil gas control.** Health Canada radiation safety experts provide scientific advice to the Task Group on Radon and Soil Gas Mitigation at Codes Canada (National Building Code). Their input can truly enhance public health protection and help support efforts at all levels of government to reduce radon-attributable lung cancer from radon exposure in homes.

**OPHA supports amendments to the Ontario Building Code as proposed in Change Number: B-09-04-01 that would increase *“the resiliency of houses and small buildings designed and constructed in conformance with Part 9 to reduce the likelihood of severe damage or total loss in high wind events, specifically from an EF2 tornado.”*** Incorporating climate change science and regional climate forecasts should be mandatory when updating or establishing building code requirements. These measures to incorporate climate-resilient building features will help provide protection from extreme weather events including flooding and tornadoes. OPHA appreciates the consideration of some health indicators in cost benefit analysis of wind protection measures for the Ontario Building Code<sup>vii</sup>, and encourages the Government of Ontario to consider additional measures of population health and health equity in all amendments to the Code. OPHA also urges the Government of Ontario to explicitly identify the need for climate-resiliency in all aspects of amendments to the building code, acknowledging that Ontario’s changing climate demands urgent action to protect health, the environment, and the economy.

Thank you for considering our concerns and recommendations with respect to proposed changes to the Ontario Building Code (O. Reg. 332/12) as outlined in ORR 22 - MMAH016 and as related to Bill 23, the

proposed More Homes Built Faster Act. We would welcome the opportunity to meet with the government to discuss the proposed changes and solutions that address concerns related to this proposed legislative change.

Sincerely



John Atkinson  
Executive Director  
Ontario Public Health Association

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<sup>i</sup> MINISTRY OF MUNICIPAL AFFAIRS AND HOUSING. PROPOSED CHANGE TO THE 2012 BUILDING CODE O. REG. 332/12 AS AMENDED. CHANGE NUMBER: B-07-06-03

<https://www.dropbox.com/s/bi4bsg3k4l3bd5i/B-07-06-03.%207.6.5.3.%281%29.Hot%20Water%20Temperature-Day%20Care.pdf?dl=0>

<sup>ii</sup> MINISTRY OF MUNICIPAL AFFAIRS AND HOUSING. PROPOSED CHANGE TO THE 2012 BUILDING CODE O. REG. 332/12 AS AMENDED. CHANGE NUMBER: B-09-13-01

[https://ucfa08f4f53ec141b96171c6dc5e.previews.dropboxusercontent.com/p/orig/ABuHP51ktIAumSiaWEpELc8cp-3EyEPzeQ2MAxZ1nllN\\_O0b-MUojQrqPURLlhBbk7ZX2ZhJ5LawoXq4EHln5KU-X-tNGMTQWIPZB47Pa9RApkJsV5k83hGyBYXe6fw551111F1W7moJx1\\_SECT5x0D3pDOldqf7qe0rWPEzo4bgThKFWIHT8Xi-MP0XlPgeJ9j-his93PU4ZhbXcrAz2VzOroUUzpcHfuveXuzukZywh3PfSgWEx-4dC5UmomsZvZxP9OkwC\\_NcN\\_UeZmJfbkx3QdczTVwMlsvOUOSlw0vSpljP-C3s5amRtZIPANphST5HdDNNvmwRyg89YppfqGQjSq4WiZqNy\\_JYrdKIKR7lpPWUAK\\_IWUv\\_zlYJPW70KCOh\\_6AdWbtjbPm\\_uHyQVttOM40BDKs9vXj73JzkOYyYBMAOrHwoqkUsSWqPSeG90/p.pdf](https://ucfa08f4f53ec141b96171c6dc5e.previews.dropboxusercontent.com/p/orig/ABuHP51ktIAumSiaWEpELc8cp-3EyEPzeQ2MAxZ1nllN_O0b-MUojQrqPURLlhBbk7ZX2ZhJ5LawoXq4EHln5KU-X-tNGMTQWIPZB47Pa9RApkJsV5k83hGyBYXe6fw551111F1W7moJx1_SECT5x0D3pDOldqf7qe0rWPEzo4bgThKFWIHT8Xi-MP0XlPgeJ9j-his93PU4ZhbXcrAz2VzOroUUzpcHfuveXuzukZywh3PfSgWEx-4dC5UmomsZvZxP9OkwC_NcN_UeZmJfbkx3QdczTVwMlsvOUOSlw0vSpljP-C3s5amRtZIPANphST5HdDNNvmwRyg89YppfqGQjSq4WiZqNy_JYrdKIKR7lpPWUAK_IWUv_zlYJPW70KCOh_6AdWbtjbPm_uHyQVttOM40BDKs9vXj73JzkOYyYBMAOrHwoqkUsSWqPSeG90/p.pdf)

<sup>iii</sup> Government of Canada, 2019. CAN/CGSB-149.11-2019 Radon Control Options for New Construction in Low-Rise Residential Buildings [https://publications.gc.ca/collections/collection\\_2019/ongc-cgsb/P29-149-011-2019-eng.pdf](https://publications.gc.ca/collections/collection_2019/ongc-cgsb/P29-149-011-2019-eng.pdf)

<sup>iv</sup> Health Canada. <https://www.canada.ca/en/health-canada/services/health-risks-safety/radiation/radon.html>

<sup>v</sup> Health Canada. <https://www.canada.ca/en/health-canada/services/publications/health-risks-safety/guide-radon-measurements-residential-dwellings.html>

<sup>vi</sup> Canadian Environmental Law Association. [https://cela.ca/wp-content/uploads/2019/07/Radon-Policy-Scan-Full-Report-with-Appendices\\_0.pdf](https://cela.ca/wp-content/uploads/2019/07/Radon-Policy-Scan-Full-Report-with-Appendices_0.pdf)

<sup>vii</sup> Institute for Catastrophic Loss Reduction. 2022. Costs and Benefits of Wind Protection Measures for the Ontario Building Code.

[https://uc1d8570d626360963a5b6497dc4.previews.dropboxusercontent.com/p/orig/ABvjGksdW\\_cROPfnxebfoODYyon\\_EJUGlWrHmldGSBuEQIQVG6r-Kozv8Gi1iZQ\\_0m7qMtSxYdw\\_tOrwdXnzQNsXAVyKEmq91d4ZCXocGwME5N3vq-gOF6bmUndYJxhBmNXZdwfyLrD6S5dXpL\\_bmvJMSFBREQd9nkLZmJ1Yo5pwTrwXFr\\_IF6eUudou0rWMJ4sPgLYe74IECjOL4evvt0yz-ltOHgavtZFNjCCEMF9TuknvwTJT2zU\\_VVLJZnDuvBl-REDwHhkrSRCE\\_IMzn90TLUkMo49cdytgTPmOrlpwRshlFeGsAy5P9FevuQf6GXID-qOu7HqD2OgluEXHcPuqlGi\\_Gp9rJ\\_QzwHODNzIRW1YvS6KIANDWlwjPs\\_ipw7CZKtgveGtBBuVBZsi1jnlUs8vVrvCqWI22t6VqQO1odpmlid5Pki7Vg9O\\_2ZlgIKSY/p.pdf](https://uc1d8570d626360963a5b6497dc4.previews.dropboxusercontent.com/p/orig/ABvjGksdW_cROPfnxebfoODYyon_EJUGlWrHmldGSBuEQIQVG6r-Kozv8Gi1iZQ_0m7qMtSxYdw_tOrwdXnzQNsXAVyKEmq91d4ZCXocGwME5N3vq-gOF6bmUndYJxhBmNXZdwfyLrD6S5dXpL_bmvJMSFBREQd9nkLZmJ1Yo5pwTrwXFr_IF6eUudou0rWMJ4sPgLYe74IECjOL4evvt0yz-ltOHgavtZFNjCCEMF9TuknvwTJT2zU_VVLJZnDuvBl-REDwHhkrSRCE_IMzn90TLUkMo49cdytgTPmOrlpwRshlFeGsAy5P9FevuQf6GXID-qOu7HqD2OgluEXHcPuqlGi_Gp9rJ_QzwHODNzIRW1YvS6KIANDWlwjPs_ipw7CZKtgveGtBBuVBZsi1jnlUs8vVrvCqWI22t6VqQO1odpmlid5Pki7Vg9O_2ZlgIKSY/p.pdf)

### More about the Ontario Public Health Association

OPHA has established a strong record of success as the voice of public health in Ontario. We are a member-based, not-for-profit association that has been advancing the public health agenda since 1949. OPHA provides leadership on issues affecting the public's health and strengthens the impact of those who are active in public and community health throughout Ontario. OPHA does this through a variety of means including advocacy, capacity building, research and knowledge exchange. Our membership represents many disciplines from across multiple sectors.

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