

Ministry of Long-Term Care

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durée**

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November 16, 2020

Dear Long-Term Care Home Licensees:

Re: 10-Point Heating, Ventilation, and Air Conditioning Plan

As Ontario continues to experience waves of COVID-19, it is critical that Heating, Ventilation, and Air Conditioning (HVAC) systems in long-term care (LTC) homes are properly maintained and operating at optimal levels. Properly operating HVAC systems positively impact the health and safety of long-term care home residents, staff and caregivers.

The Ministry of Long-Term Care recently announced **\$61.4 million** for long-term care homes across the province to support minor capital improvements directly linked to improved Infection Prevention and Control (IPAC) practices and an additional **\$22.8 million** in July, 2020 to support minor capital repairs. In addition, the federal government of Canada has adapted the Investing in Canada Infrastructure Program (ICIP) to better respond to the impacts of COVID-19 by creating a temporary COVID-19 Resilience Infrastructure Stream. Under this new ICIP COVID-19 stream, long-term care (LTC) homes will be provided up to **\$100 million** in combined federal-provincial one-time funding to support COVID-19 resilience infrastructure projects.

The ministry is encouraging all long-term care homes to prioritize these improvements to their facilities. As a result, we have engaged Infrastructure Ontario (IO) to work with us to develop recommendations for HVAC systems that address thermal comfort, as well as health and safety needs that will help protect long-term care residents, staff and caregivers.

10-Point HVAC Plan

In alignment with evolving industry and public health recommendations, IO has developed a 10-Point HVAC Plan that offers a guideline to improve air quality in long-term care homes (see Appendix A). Homes are encouraged to use this 10-Point HVAC Plan to ensure their HVAC systems are operating at an optimal level.

Long-term care homes are encouraged to prioritize HVAC system upgrades or repairs, including implementation of the 10-Point HVAC Plan, subject to applicable funding policies, including the Minor Capital Funding Policy, which does not cover routine maintenance.

Thank you for your continued dedication and commitment to improving the quality of long-term care in Ontario. I look forward to working with you as we continue to build a 21st century long-term care system that is well-resourced, puts residents at the center and is ready to welcome our most vulnerable when and where they need it.

Sincerely,



Richard Steele
Deputy Minister of Long-Term Care

- c: Ms. Donna Duncan, Chief Executive Officer, Ontario Long-Term Care Home Association
Ms. Lisa Levin, Chief Executive Officer, Advantage Ontario
Ms. Sheila Bristo, Assistant Deputy Minister, Long-Term Care Operations Division
Ms. Janet Hope, Assistant Deputy Minister, Long-Term Care Policy Division
Mr. Brian Pollard, Assistant Deputy Minister, Long-Term Care Capital Development Division

Appendix A
10-Point HVAC Plan

Number	Action	Details
1	Clean, inspect and maintain HVAC systems in accordance with the original equipment manufacturer, at a minimum.	<ul style="list-style-type: none"> • This includes air handling unit systems, roof top units, exhaust/return fans, hydronic systems (radiators), fan coil units, electrical heating, etc.
2	Replace air filters including inspection and repair filter housing/racks as required to minimize air leakage. In locations without centralized filtration and/or poor ventilation, install Standalone Air Filtration Units, where feasible.	<ul style="list-style-type: none"> • Where operationally feasible, upgrade to MERV 13 or the highest level achievable including High-Efficiency Particulate Air (HEPA) filtration. The American Society of Heating and Air-Conditioning Engineers recommends that “Filters in HVAC systems should be changed according to the typical schedule or longer than normal.” Please see more details at: https://www.ashrae.org/technical-resources/filtration-and-disinfection-faq.
3	Inspect, test, and where necessary repair, all air dampers every 60 days, where applicable and feasible.	<ul style="list-style-type: none"> • In homes with building automation systems (BAS), verify physical actuator and damper operation against BAS operation/readings. • Carry out adjustments, repairs or component replacements as required.
4	Bypass heat recovery systems, where applicable and feasible, to minimize recirculation of unconditioned air throughout the HVAC system.	<ul style="list-style-type: none"> • The bypass of the heat recovery system will minimize recirculation of unconditioned air throughout the system.
5	On daily basis, maximize outdoor air and reduce/eliminate recirculation, where applicable and feasible.	<ul style="list-style-type: none"> • As reasonable and where possible, maximize outdoor air supply as operationally feasible.
6	Prior to summer cooling season, complete a full preventative maintenance program for full cooling season, as per the original equipment manufacturer’s recommendation at a minimum.	<ul style="list-style-type: none"> • Start-up/maintenance of cooling systems including cooling towers, chillers, water treatment (as applicable), split systems, roof top units, pneumatic systems, window AC units, heat pumps, fan coil systems, individual room cooling units, etc. to ensure optimal system operation.

<p style="text-align: center;">7</p>	<p>Prior to winter heating season, complete a full preventative maintenance program for full heating season, as per original equipment manufacturer's recommendations at a minimum.</p>	<ul style="list-style-type: none"> • Start-up/maintenance of boilers, water treatment (as applicable), radiators, rooftop units, heat pumps, fan coil systems, humidification systems, pneumatic systems, individual room heating units, etc., to ensure optimal system operation.
<p style="text-align: center;">8</p>	<p>Run air handling units/fan systems 24/7 while maximizing outdoor air.</p>	<ul style="list-style-type: none"> • Run washroom exhaust fans 24/7 to provide increased air exchanges in the washroom facilities, where systems are capable.
<p style="text-align: center;">9</p>	<p>Test and operate the sequences of the Building Automation System/HVAC controls every 30 days. Review and update operating schedules as required.</p>	<ul style="list-style-type: none"> • BAS sequencing/schedules will be tested prior to re-entry. • Daily checks of the BAS system are completed by onsite staff, reprogramming will be completed as conditions dictate.
<p style="text-align: center;">10</p>	<p>Monitor and trend temperature, relative humidity and ventilation levels on a continuous basis, where feasible.</p>	<ul style="list-style-type: none"> • Continuous monitoring of the BAS system allows for ongoing monitoring of building conditions, indoor air quality and allows for early intervention and action of changing conditions.