

HVAC & AIR FILTRATION

Industry Innovations for winter 2022 will showcase innovative product offerings supporting heating, ventilation, and air conditioning (HVAC) and air filtration systems for all healthcare settings, including acute care, long-term care, and community care settings.

Many prevention strategies were tested and validated throughout the COVID-19 pandemic. We have learned that measures such as physical distancing, masking, symptom screening, and vaccination are the cornerstones of comprehensive COVID-19 prevention plans. In addition to standard measures such as these, provincial, national, and international guidelines recognize that a well-functioning HVAC system plays a role in reducing transmission by removing and/or diluting aerosols that may contain viruses from indoor spaces. Conversely, poorly ventilated spaces have been shown to contribute to outbreaks when aerosol production from infected individuals becomes concentrated in the air over time.

The COVID-19 pandemic has provided a unique opportunity for not only the infection prevention and control community, but the medical community as a whole, to re-examine previously held beliefs about airborne transmission, droplet transmission, and what we know now is a multitude of possibilities in between these two realities. Never before has such a spotlight been shone on the importance of a properly sized, installed, and maintained HVAC system within our healthcare organizations. Such a focus on the environment as a potential enabler or preventor of transmission has given a unique opportunity to our

industry partners to think creatively and innovatively about how to make our healthcare buildings even safer.

We welcome submissions from our industry partners who would like to share and showcase their HVAC and filtration ideas in the Winter 2022 edition of *Industry Innovations*.

Guidelines:

The role of the Editor, *Industry Innovations* is to ensure this publication is a high quality, structured, and comparative resource for Infection Prevention and Control Canada's (IPAC Canada) core membership. All submissions to *Industry Innovations* are subject to curatorial review. Relevance to IPAC Canada membership and integrity of claims will be assessed prior to approval or denial of publication partnership. For whitepapers accepted for publication, the editor and publisher will coordinate with the submitting industry partner prior to publication with applicable technical editing requests. The editor and publisher will also ensure that the curation and publishing process of whitepapers and advertisements accepted for publication are managed transparently in consultation with authoring industry partners.

Preferred whitepapers for publication in *Industry Innovations* will refrain from subjective and unverifiable claims. They will use a mixture of industry voice, technical specification, and use-case

logistics with significant attention to the immediate organizational impact of implementation. The numbered guideline sections below are sequentially ordered to provide a comparable reading flow throughout *Industry Innovations* volumes and must be adhered to during whitepaper development. The suggested word count is included for the whitepaper author's reference to ensure sufficient content is incorporated into each section without exceeding the suggested submission length of 4500 words.

General Guidelines:

- Core Focus: *Industry Innovations'* guidelines are structured to provide a comparable summary of considerations to enable IPAC Canada readership to assess their organization's implementation readiness and the immediate use cases of an industry product
- Please refrain from comparing your product's solution to competing solutions
- Where clinical or industry research is referenced; ensure summary description of the research is included rather than generalizations

For in-text citations, use parenthetical numbers (Vancouver style) and append references to end of whitepaper using the same order of numbers appearing in-text

1. Abstract – ~500 Words:

- What makes this product stand out as an innovative contribution to HVAC systems in health care settings?
 - Please refrain from comparative analysis to other HVAC innovations, but common standardized processes may be referenced.

2. Specifications – ~600 Words:

- Describe the technology/engineering design of the HVAC innovation and any compatibilities with regards to accessories or equipment innovation.
- If there are electronic components to the technology innovation, please describe their utility
- Describe any additional resources used peripherally to your product innovation if applicable and what ongoing resources a healthcare setting implementing your solution will need to have in place to support the innovation you describe.

3. Metrics – ~600 Words:

- Describe any tracking ability for use with the innovation, as applicable (e.g. filter effectiveness, air exchanges/hour, pressurization, etc.)
- Previous quantitative research in effectiveness of the innovation may be described and referenced here.

4. Practice Changes – ~600 Words:

- Please describe the frontline practice changes involved in implementing your company's solution (not the overall impact but rather the impact of your HVAC innovation (accessory use, practice change, cleaning requirements, maintenance requirements, etc.).
 - For example, does your solution require specially trained individuals to use or maintain the solution? Are there any consumables that require regular changes by staff? Does your innovation run continuously or does it require activation?

5. Implementation – ~600 Words:

- Please describe the steps involved in implementation of the HVAC innovation.
- What stakeholders are needed (Infection Control, Biomed, Health Educator, Peri-operative, Physicians, Environmental Services, Facilities/Maintenance, etc.)?
- What activities involved in initial implementation/ongoing maintenance of this innovation will be managed by your company?
- What initial/ongoing maintenance steps will be required to be managed by the healthcare setting hosting your innovation?
- What maintenance steps (if any) are required to ensure the innovation is operating effectively on a continuous basis?

6. Narrative – ~700 words:

- Please provide in narrative format the post-implementation use-management process using the product by healthcare personnel and any new processes involved with use of the product.

7. Cost Estimate – ~300 words:

- Please provide a cost estimate in table format for implementation of your solution given typical needs in a small/medium/large healthcare setting

8. Contact Info –

Please provide detailed contact info (phone, email, webpage, etc.) to ensure interested readers are able to reach out for further information and estimates.