AIVC April Workshop

Arnold Janssens – Chair of AIVC COVID-19 Working Group

- **Series of four webinars**
  - Organised in collaboration with IEA-EBC Annex 86 'Energy efficient IAQ management'
- April 1, Building ventilation: How does it affect SARS-CoV-2 transmission?
- April 8, IAQ and ventilation Metrics
- April 13, Big data, IAQ and ventilation -part 1
- April 21, Big data, IAQ and ventilation -part 2

Register at www.aivc.org

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Introduction: context of the webinar

- Scientific consensus that airborne transmission by aerosols plays important role in spreading COVID-19 in indoor spaces
- Many organisations are working on this topic and have produced guidelines: REHVA, ASHRAE, CIBSE, IEQ-GA, …
- AIVC-project 'Ventilation, airtightness and COVID-19': collect, discuss and disseminate information about COVID-19 in relation to ventilation and airtightness
  - Newsletters
  - Webinars
  - FAQ's

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AIVC-newsletter, FAQ website

AIVC Newsletter Special Issue COVID-19

Editorial

We hope you are keeping safe and healthy during this challenging period. The COVID-19 pandemic has an unprecedented impact on all of us, both personally and professionally. As researchers and practitioners we also have a role to play in developing solutions to provide healthy indoor spaces to reduce disease transmission, and in informing the public. Based on developing scientific knowledge it has become clear that, although close contact transmission is the dominant transmission route, long-range airborne transmission through small size infected aerosols plays an important role in spreading COVID-19 in indoor spaces. As a consequence, increasing outdoor air change rates, or applying other technical measures to remove infected aerosols are necessary to avoid infection indoors.

The AIVC board decided in their last (online) meeting of September 2020 to start a project to collect, discuss and disseminate information about COVID-19 in relation to ventilation and airtightness. A working group was created to define the activities and outputs of the project with the title "ventilation, airtightness and COVID-19". The working group members are listed at the last page of this newsletter.

This newsletter is a first outcome of the project. It presents a number of questions and answers developed and reviewed by working group members. The collection of relevant questions and the development of clear answers in line with most recent scientific understanding is a continuing process, to which we also invite you, as a reader, to participate. Let us know if you have a question that the working group should look into. This way we hope to expand the FAQ-section, also on the AIVC-website. Many other international organizations in the domain of HVAC, health care or prevention have developed information and guidance documents to support decision makers and public about the COVID-19 pandemic. This newsletter therefore contains an overview of frequently asked questions in relation to COVID-19 and building ventilation, developed by a number of those organizations. The ventilation related guidelines by REHVA and ASHRAE will receive specific attention during the upcoming AIVC webinar, to be held on November 20th, 2020. This webinar is a second outcome of the project, and is announced in more detail in this newsletter and on the AIVC website.

We wish you a pleasant reading and look forward to seeing you in our future events.

Arnold Janssens, chair of AIVC Working Group on COVID-19

@AIVCnews

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20 November 2020 (16:00-17:30 CET) – AIVC Webinar – COVID-19 Ventilation related guidance by ASHRAE and REHVA

Ventilation is recognized as a major element in strategies for minimizing the risk of COVID infection. REHVA and ASHRAE have developed guidelines, insisting on existing evidence of long-range aerosol-based transmission and emphasizing the importance of ventilation.

The Air Infiltration and Ventilation Centre with support from ASHRAE and REHVA are organizing the webinar "COVID-19 Ventilation related guidance by ASHRAE and REHVA" to be held on Friday November 20th, 2020 at 16:00-17:30 (CET).

The webinar will present the COVID-19 related guidelines by REHVA and ASHRAE and will also have a closer look to the similarities and differences in both guidelines.

Presentations and Speakers

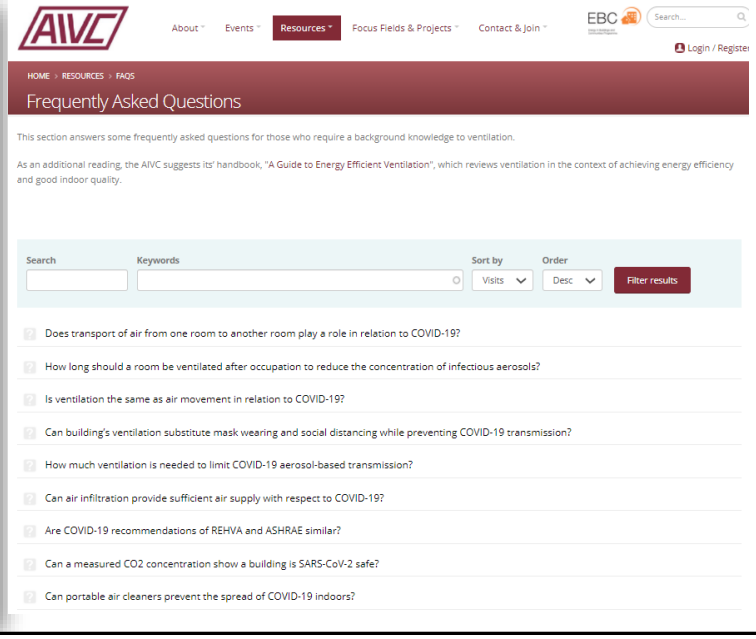
- Introduction, *Arnold Janssens, chair of AIVC WG COVID-19*
- REHVA guidance regarding ventilation, *Jarek. Kurnitski – chair of REHVA COVID-19 task force*
- ASHRAE guidance regarding ventilation, *William P. Bahnfleth, chair of ASHRAE's Epidemic task force*
- Similarities and differences between REHVA's & ASHRAE's guidance, *Valérie Leprince, member AIVC COVID-19 working group & ASHRAE's Epidemic task forces*

Participation to the webinar is FREE but requires you to REGISTER for the event. For further information please visit our website.

Call to readers

The AIVC's COVID-19 Working Group members researched and provided responses to the frequently asked questions (FAQ), in this special issue.

Have a question for the FAQ? Email us at info@aivc.org



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Frequently Asked Questions

This section answers some frequently asked questions for those who require a background knowledge to ventilation.

As an additional reading, the AIVC suggests its' handbook, "A Guide to Energy Efficient Ventilation", which reviews ventilation in the context of achieving energy efficiency and good indoor quality.

Search Keywords Sort by Visits Order Desc Filter results

- Does transport of air from one room to another room play a role in relation to COVID-19?
- How long should a room be ventilated after occupation to reduce the concentration of infectious aerosols?
- Is ventilation the same as air movement in relation to COVID-19?
- Can building's ventilation substitute mask wearing and social distancing while preventing COVID-19 transmission?
- How much ventilation is needed to limit COVID-19 aerosol-based transmission?
- Can air infiltration provide sufficient air supply with respect to COVID-19?
- Are COVID-19 recommendations of REHVA and ASHRAE similar?
- Can a measured CO2 concentration show a building is SARS-CoV-2 safe?
- Can portable air cleaners prevent the spread of COVID-19 indoors?

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Building ventilation: How does it affect SARS-CoV-2 transmission?

webinar
2021.04.01

Objectives:

- To address mitigating role of building ventilation in spread of pandemic,
- To discuss how ventilation affects exposure to infectious aerosols, based on knowledge developed in modelling, experiments and system design.

17:00 | Introduction, ***Arnold Janssens – chair of AIVC WG COVID-19, Ghent University, Belgium***

17:10 | The Role of Building Ventilation in Indoor Infectious Aerosol Exposure, ***Andrew Persily – NIST, USA***

17:25 | Modelling uncertainty in the relative risk of exposure to the SARS-CoV-2 virus by airborne aerosol transmission, ***Cath Noakes – University of Leeds, UK***

17:40 | Questions and Answers

17:50 | Field measurements of aerosol exposure in indoor environments, ***Roberto Traversari – TNO, Netherlands***

18:05 | Ventilation system design and the risk areas for spreading airborne contaminants in office buildings, ***Alireza Afshari – Aalborg University, Denmark***

18:20 | Questions and Answers

18:30 | Closing & End of webinar

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Building ventilation: How does it affect SARS-CoV-2 transmission? speakers

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Andrew Persily
NIST, USA

Cath Noakes,
University of Leeds, UK

Roberto Traversari,
TNO, the Netherlands

Alireza Afshari,
Aalborg University, Denmark

Webinar management

Maria Kapsalaki
(INIVE, BE)

Valérie Leprince
(INIVE, BE)

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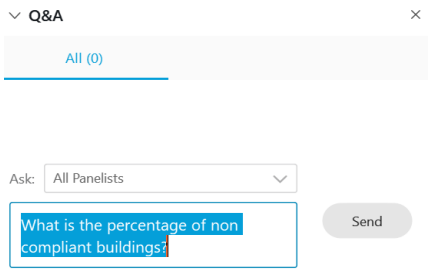
webinar
2020.04.01

How to ask questions during the webinar

Locate the **Q&A box**

Select **All Panelists** | Type your question | Click on Send

Note: Please DO NOT use the chat box to ask your questions!



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webinar
2020.04.01

NOTES:

- The webinar will be **recorded and published** at www.aivc.org within a couple of weeks, along with the presentation slides.
- After the end of the webinar you will be redirected to our **post event survey**. Your feedback is valuable so take some minutes of your time ti fill it in.

Organized by: www.aivc.org **Facilitated by** INIVE