

# WORKSHOPS SYMPOSIUM P3VENTI 2024

Wednesday 28 February 2024

Binnenklimaat Nederland, Zoetermeer

## 1. Creating an optimal form of action perspective



**Fred Jansen, Ministry of Health, Welfare and Sport, and Roberto Traversari, TNO**

Moderation by Lisa Peters

*For researchers, decision makers in long-term healthcare institutions and policy makers*

During a pandemic, we would like to handle as quickly and efficiently as possible to stop the spreading of the virus. Therefore, it is important to disseminate the research results as good as possible. How can we build a community in which we exchange knowledge and questions regarding the role of ventilation? What kind of tools help you most to take action? We would like to discuss with you the form in which the action perspective can best take shape.

### Take away of workshop

During the workshop, a constructive discussion arose about the various channels used for gathering knowledge during the COVID-19 pandemic. At that time, there was a need for concrete advice, which was very limited, especially regarding ventilation during the early stages of the pandemic. During that phase, the expert panel on COVID-19 and the RIVM website were utilized. Many sources were inconsistent and even contradicted each other. It was remarkable that the long-term care also set up their own information/expert teams. It would help these teams if they could generate their own tailor-made advice in one place that they can use for their 'customers'. The conclusion from the workshop was that ideally, there should be one place where all information and concrete advice are available. If necessary, advice could be accompanied by simple decision-making flowcharts.

## 2. Decision making under uncertainty during a pandemic



**Aleksandrina Skvortsova, University of Leiden, and Rowie Huijbregts, Scientist Strategy & Policy TNO**

*For decision makers in long-term healthcare institutions and policy makers*

Decision makers prefer to make decisions based on facts and knowledge. But how do they deal with this during a pandemic when the situation is uncertain? To align our research with the way (investment) decisions are being made, we would like to discuss what barriers you encountered there and how you dealt with these.

### Take away of workshop

Political decision-making and public policymaking during a pandemic involve navigating

complex and unpredictable situations where outcomes are uncertain. Emphasizing evidence-based decision-making is paramount, as it provides a foundation rooted in solid data and research, enhancing the efficacy of measures and interventions. However, numerous barriers, including time constraints, the lack of conclusive scientific evidence, and cognitive biases, challenge the seamless adoption of evidence-based approaches. Bridging the gap between research and decision-making remains difficult, underscoring the need for effective communication and collaboration.

### 3. Standardization of web-based tools for airborne infection risk calculations



**Amar Aganovic, Associate Professor  
UiT – The Arctic University of  
Norway and  
Jibola Owolabi, PhD Researcher UiT –  
The Arctic University of Norway**

*For researchers*

Numerous web-based tools have emerged to assess airborne infection risks in enclosed spaces. However, comparing the outputs of these web-based tools poses significant challenges due to variations in assumptions, mathematical models, data sources, and user interfaces. We will compare digital airborne infection risk calculators while employing standardized building-specific input parameters.

#### Take away of workshop

Participating in the P3Venti symposium and the web-based tools standardization workshop for airborne infection risk calculations was a rewarding experience. Our key takeaways from the workshop include insights into the importance of an acceptable standardized approach to web-based tools for airborne infection risk calculations. This ensures output consistency by aligning assumptions, mathematical models, and data sources. Additionally, discussions highlighted the potential of integrating mathematical models like Wells-Riley with computational fluid dynamics (CFD) for enhanced airborne disease prediction and analysis accuracy, fostering collaborative efforts to advance research methodologies.

### 4. The effect of ventilation systems and air cleaning units



**Menno Hinkema, TNO /  
dissemination coordinator CLAIRE, and  
Stefanie Meeuwis, postdoctoral  
researcher University of Leiden**

*For researchers, decision makers in long-term healthcare institutions and policy makers*

The research project CLAIRE (Clean Air for Everyone) explores the potential of mechanical ventilation and air cleaning to limit the adverse impacts of pandemics on health and well-being. CLAIRE's primary focus areas are primary schools and nursing homes. CLAIRE engages with civil society organizations and the business community to explore how effective innovations can find broad application in practice. This session presents interim results and invites attendees to explore directions and priorities for the second half of the project.

### Take away of workshop

- It is crucial to maintain a realistic view of the role and importance of ventilation, and neither oversell nor undersell its impact. Invest sensibly in research and innovation and target areas and circumstances where ventilation is most likely to have a substantial impact.
- SARS-COV-2 has disappeared from public view and memories of the pandemic are fading. To stimulate structural investment in improvement of ventilation, we need to shift incentivization away from specific pandemic preparedness to a broad perspective on the importance of, and stressors affecting, indoor air quality.

## 5. Pandemic response strategies in the built environment



**Piia Sormunen - Industry Professor Building services Tampereen University**

*For researchers, decision makers in long-term healthcare institutions and policy makers*

The E3 project (Finland) wants to harness modern science and technology to create effective countermeasures to prevent the spreading of novel infectious diseases. The aim is to have technical solutions already in place during the current pandemic and before the next pandemic emerges, there would be technological solutions available and installed in indoor environments mitigating the transmission of pathogens in spaces where people meet. During this workshop, E3 research results and the corresponding implications will be discussed.

### Take away of workshop

It is no use introducing new building regulations on ventilation when we do not know the current performance, which is probably worse than required by the current building code. Monitoring ventilation performance is the first thing to do. Then enforcing existing legislation.

## 6. Experiences and lessons from Covid-19 in long term care centers



**Jelger Arnoldussen (EIB)**

*People working in the long term care, such as managers, directors, facility managers, and nurses. Also people from lobby organisations and people with other backgrounds are welcome.*

During the Covid-19 pandemic, older people and other people in long term care centers were more vulnerable when infected with Covid-19. Therefore, long term care centers needed to take precautions. How did the centers do this? How did this affect the quality of the care? Was this the best option? What lessons have been learned?

### Take away of workshop

It was a very informative day. For the social cost-benefit analysis we are conducting, we gained useful information, including the consideration of CO<sub>2</sub> emissions when constructing and using ventilation systems. In addition, the networking led to insights on the possible role of ventilation in future pandemics, which are likely to be of a different nature than the COVID-19 pandemic. In short, the symposium provided concrete tools to improve our research.