# Overview of the Environmental Health Matters Initiative

Linsey Marr, Ph.D. Professor Virginia Tech



### **EHMI VISION**

The Environmental Health Matters Initiative seeks to improve the **health of all people equitably** by promoting **evidence-based** assessment, prevention, adaptation, and strategic mitigation of **complex and interconnected environmental stressors** that affect human health and disease over lifetimes.

#### The EHMI Provides...



#### **CONNECTION**

The unique ability to convene stakeholders from different backgrounds, sectors, institutions, and scientific disciplines.



#### **CREDIBILITY**

A long organizational history of working in the environmental health field.



#### **STEWARDSHIP**

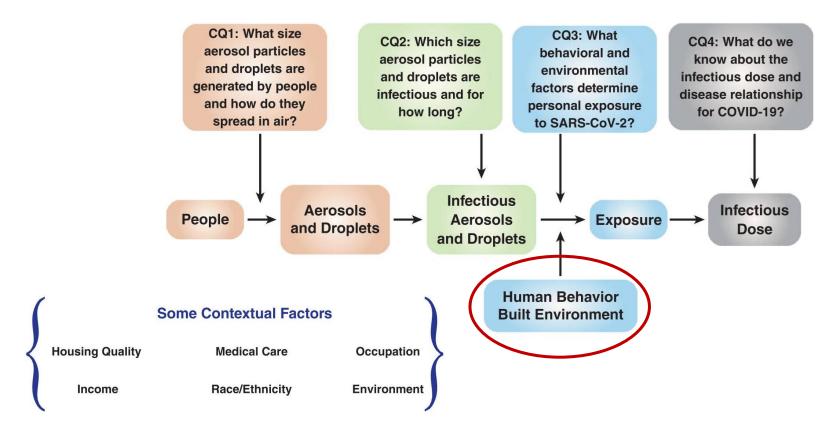
Leadership from an experienced program and advisory committees with experts from government, business, and academia.



#### **NEUTRALITY**

A neutral, nonpartisan space where stakeholders can share insights.

# EHMI Workshop on Airborne Transmission, 2020: Framework and Key Questions



Overview of the Indoor Air Management of Airborne Pathogens

A Workshop Series



### **Workshop Series Planning Committee**

**Linsey Marr** (Co-Chair) Virginia Tech

**Jonathan M. Samet** (Co-Chair) Colorado School of Public Health

**Theresa Chapple-McGruder**Oak Park Department of Public Health

James W. Fox Transportation Safety and Security consultant and Former AGM System Safety at SEPTA John McCarthy

Environmental Health and Engineering, Inc

**Catherine Noakes**University of Leeds

Lucas Rocha-Melogno ICF

Monica Schoch-Spana
Johns Hopkins Center for Health Security

**Jeffrey M. Vincent** University of California, Berkeley

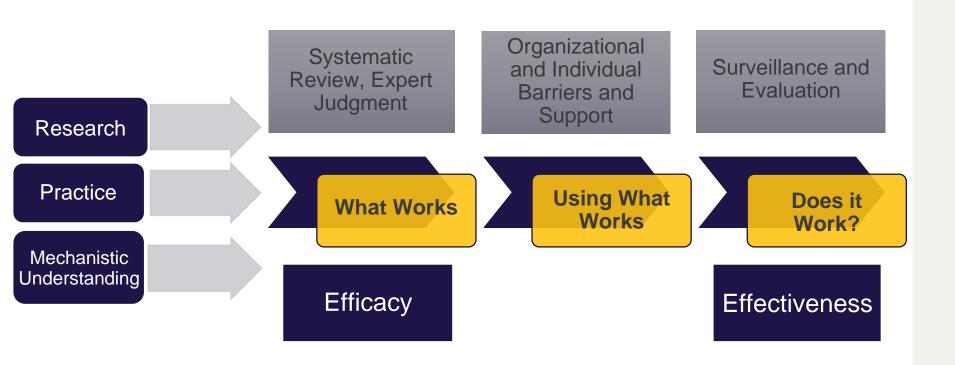
# **Goals of the Workshop Series**

Drawing on lessons learned and new research on indoor air management since 2020, this workshop series will convene an interdisciplinary and multisectoral group of natural, physical, and social scientists together with facilities managers, ventilation engineers, and representatives of populations using public and private facilities.

Through panel discussions and participatory exercises, the participants will:

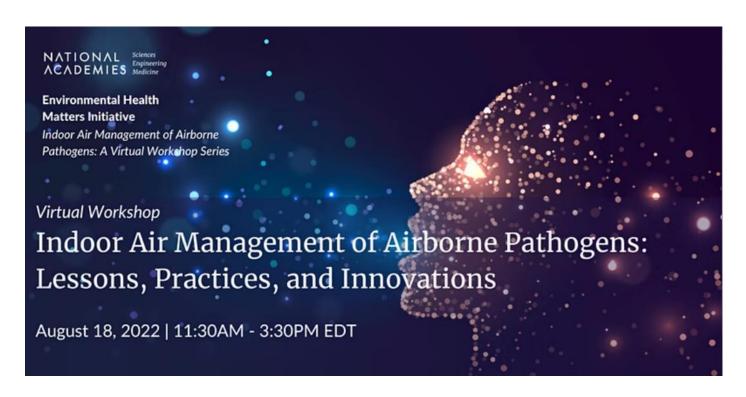
- 1. Review the state of knowledge concerning building management, ventilation, and air cleaning for airborne pathogens;
- 2. Discuss experiences with management of enclosed spaces during the pandemic; and
- 3. Identify promising practices to be adopted to make these places safer.

#### **Discussion Framework**





# Workshop #1



# **Key Takeaways from Workshop #1**

- 1. Masking, ventilation, filtration, and UV reduce the amount of virus in the air and thus reduce the risk of transmission.
- 2. We need to start with the basics, ensuring that our existing engineering systems are appropriately designed, sized, and operating. Then optimization and innovation.
- 3. Implementation requires attention to human factors.

# Workshop #2



# **Key Takeaways from Workshop #2**

- 1. There is tremendous variation in school buildings and engineering controls and components from school to school.
- 2. There are three main engineering controls in school buildings that have been shown to work: ventilation, filtration, and germicidal UV. We must continually assess and verify effectiveness.
- 3. Equitable distribution of resources is needed at the national scale.
- 4. Implementation remains a critical barrier for schools.

# Goal of Workshop #3



➤ Identify promising practices to be adopted at different levels to make access to public transportation equitable and safe

# Agenda at a Glance

#### Session 1

State of knowledge concerning research regarding public transportation safety and management to reduce transmission of airborne pathogens equitably.

#### Session 2

Case studies - On-the-ground experience

### Session 3

Barriers to implementation and roles for different stakeholders at the Federal, State, and Local levels and in the non-government sector.

# **Session 1: State of the Knowledge**

#### Moderator

**Cath Noakes, University of Leeds** 

# Speakers

- Susan Grant-Muller, University of Leeds
- Jody Holton, SEPTA

### **Panelists**

- Madeleine Parker, UC Berkeley
- Jason DeGraw, Oak Ridge National Lab