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ASHRAE Responds to Pandemic

ASHRAE Releases Updated Position Document on Infectious Aerosols

ATLANTA—With infectious diseases transmitted through aerosols, HVAC systems can have a major effect on the transmission of the disease, according to the “ASHRAE Position Document on Infectious Aerosols.” An important step to curtailing the spread is decreasing exposure of secondary hosts.

“Designers of mechanical systems should be aware that ventilation is not capable of addressing all aspects of infection control. HVAC systems, however, do impact the distribution and bio-burden of infectious aerosols,” according to the position document.

ASHRAE’s Environmental Health Committee Position Document Committee revised the position document in the midst of the

COVID-19 pandemic. The ASHRAE Board of Directors approved it in mid-April. The “ASHRAE Position Document on Infectious Aerosols,” provides recommendations on the design, installation and operation of HVAC systems, non-HVAC control strategies and strategies to support facilities management.

The position document says ventilation, filtration and air-distribution systems and disinfection technologies can limit airborne pathogen transmission through the air and possibly break the chain of infection. Other strategies, including dilution and extraction ventilation, pressurization, airflow distribution and optimization, mechanical filtration, ultraviolet germicidal irradiation (UVGI) and humidity control can

reduce the risk of dissemination of infectious aerosols in buildings and transportation environments.

As a minimum, facilities of all types should follow the latest published standards and guidelines and good engineering practice, according to the position document. Based on risk assessments or owner project requirements, designers of new and existing facilities could go beyond minimum requirements using techniques covered in various ASHRAE publications.

Resources including the *ASHRAE Handbook*, Research Project final reports and articles can help designers to better prepare to control the dissemination of infectious aerosols. To read the document, visit <https://bit.ly/2XXYFiP>.

Epidemic Task Force Defines Guidance

ATLANTA—ASHRAE has created a task force of experts to deploy the Society’s technical resources to address the COVID-19 pandemic and provide guidance on how to prepare buildings for future epidemics.

In response to widening false statements surrounding HVAC systems, the ASHRAE Epidemic Task Force developed two statements to define guidance on managing the spread of SARS-CoV-2—the virus that causes COVID-19 disease—regarding the operation and maintenance of HVAC systems in buildings:

1. Transmission of SARS-CoV-2 through the air is sufficiently likely that airborne exposure to the virus should be controlled. Changes to building operations, including the operation of heating, ventilating, and air-condition-

ing systems, can reduce airborne exposures.

2. Ventilation and filtration provided by heating, ventilating, and air-conditioning systems can reduce the airborne concentration of SARS-CoV-2 and thus the risk of transmission through the air. Unconditioned spaces can cause thermal stress to people that may be directly life threatening and that may also lower resistance to infection. In general, disabling of heating, ventilating, and air-conditioning systems is not a recommended measure to reduce the transmission of the virus.

ASHRAE officially opposes the advice not to run residential or commercial HVAC systems and asserts that keeping air conditioners on during this time can help control the spread of the virus. HVAC filters and other strategies help

to reduce virus transmission while removing other air contaminants that may have health effects.

The task force's primary role is to maintain communication with members, industry partners, building owners, facility operators, government agencies and the general public. It will also review all technical questions and requests for technical guidance submitted to ASHRAE as well as other responsibilities. The task force is chaired by 2013–14 ASHRAE Presidential Member William Bahnfleth, Ph.D., P.E.

Also, ASHRAE's Environmental Health Committee issued an Emerging Issue Brief in mid-April that outlines some of the actions the Society is working on, including providing guidance for ways to promote healthy indoor air quality and to create evidence-based infection control practices. Visit <https://bit.ly/3avugLf> to read the brief.

Free Online Access to ASHRAE Handbook

ATLANTA—ASHRAE recognizes that many members continue to work while in isolation during the current health

crisis. To make this easier, members have free access to ASHRAE Handbook Online through June 30. Through this tool, members can access the complete four-volume set of the ASHRAE Handbook, audio and video clips, spreadsheets and more resources. To access the material, log in with your ASHRAE member credentials. Visit <https://bit.ly/2wTMdWa>.

Explore ASHRAE COVID-19 Resources

ATLANTA—ASHRAE's COVID-19 Preparedness Resources webpage provides guidance from the Epidemic Task Force for health-care facilities, schools and other building types. The guidance includes recommended strategies and specific "how to" information for various challenges. The page also includes resources for building industry professionals such as ASHRAE standards and guidelines, ASHRAE research reports and recorded seminars from past ASHRAE conferences. The page is updated as new information becomes available. Visit the page: ashrae.org/COVID19.

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