

Otis commissions study on elevator airflow amid COVID-19

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Findings aim to advance industry safety protocols and provide additional scientific data to inform riding public



US-based Otis Worldwide Corporation (OTIS), world's leading company for elevator and escalator manufacturing, has commissioned a study into elevator airflow, how it affects the risk of transmission of the COVID-19 virus among passengers, and how to mitigate those risks through science-based safety protocols.

The study will be led by Dr Qingyan (Yan) Chen, the James G Dwyer Professor of Mechanical Engineering at Purdue, who is widely recognized for his research into the spread of infectious disease through indoor air systems – and how to prevent it.

Dr Chen, who is also Editor in Chief of the scientific journal Building and Environment, uses sophisticated 3D modeling in his research, which currently focuses on indoor environments, aircraft cabins, and energy-efficient, healthy, and sustainable building design and analysis. He has published three books and over 470 journal and conference papers and has been invited to deliver more than 170 lectures internationally. He previously served as Principal Director of the Federal Aviation Administration's Center of Excellence (COE) for Airliner Cabin Environment Research.

"My team and I are looking forward to conducting this study to help the industry and riding public better understand the likelihood of COVID-19 transmission in an elevator environment as compared to other everyday activities, like shopping at a grocery store or eating at a restaurant," said Dr Chen.