

COVID-19 is in the air, experts say



29th May 2020

Air quality researchers around the world have joined together to support the need for airborne transmission of the COVID-19 virus to be addressed.

QUT air quality expert, Professor Lidia Morawska from <u>QUT's International Laboratory for Air Quality and Health</u> said the world should face the reality of airborne transmission in the fight against COVID-19.

"Hand washing and maintaining social distance of 1.5 metres are the main measures recommended by the World Health Organization (WHO) to avoid contracting COVID-19," Professor Morawska said.

"Unfortunately, these measures do not prevent infection by inhalation of small droplets exhaled by an infected person that can travel a distance of metres or tens of metres in the air and carry their viral content."

"Currently, no countries are considering airborne spread to prevent of transmission of the disease indoors."

"To mitigate infection spread, we recommend that authorities improve ventilation to remove virus-laden droplets from the air."

Researchers tested four different indoor microenvironments - a pharmacy, supermarket, restaurant and post office – to model infection risk based on factors such as exposure time, inhalation rates and the number of people in a set area.

Carrying out this type of modelling can help infection transmission experts to better predict the spread of a virus in an enclosed space during an epidemic, so that preventative action can be taken during this epidemic and in the future.

Professor Morawska said authorities need to put in place public health precautions to lower airborne transmission by:

- increasing ventilation of indoor spaces
- using natural ventilation
- avoiding air recirculation
- avoiding staying in another person's direct air flow
- minimizing the number of people sharing the same environment
- providing adequate ventilation in nursing homes, hospitals, shops, offices, schools, restaurants and cruise ships.

Professor Lidia Morawska was made a <u>2020 Fellow of the Australian Academy of Science</u> in recognition for her scientific work on airborne particulate matter, which has aided air quality research around the world.

Read more about Lidia's COVID-19 airborne transmission research

- Indoor precautions essential to stem airborne COVID-19
- COVID-19 could be spread on breath of infected people

LINK: https://www.gut.edu.au/institute-for-future-environments/about/news?id=164108