The importance of good ventilation

Ventilation is the process of introducing fresh air into indoor spaces while removing stale air.





Small particles that contain the virus can remain in the air a long time and build up. Bringing fresh air into a room and removing older air reduces the chance of spreading the virus.

How are buildings ventilated?



Mechanical ventilation (e.g. using ducts and fans that bring in air and distribute it in the building)

Natural ventilation (e.g. opening windows, allowing air to move in naturally)

What are the other benefits of good ventilation?



Good ventilation can:

- Help improve sleep
- Improve productivity and performance
- Decrease sickness absence

Many buildings, particularly modern ones, should meet current building regulations. As long as the ventilation systems are checked and maintained, it's quite likely that they provide enough fresh air.



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Consider ventilation in the office design



Think about ventilation in conjunction with the office layout.

E.g. One of the risks with partitions is that although they can be perceived as useful for blocking the transmission of particles, they can block the airflow.

Consider the activities of staff members: people generate more virus particles when they're active e.g. talking loudly for continuous amounts of time.

Ensure windows are easy to get to and to open. Use high-level windows or open windows intermittently to balance ventilation and comfort in cold weather.

Involve staff members in risk assessments.



What can facilities managers do in the first instance?

A simple checklist:

- Can you see how the air gets in and out?
- Have you got ventilation systems in place?
- Do you know what they are and are they working?
- If you have mechanical ventilation, do you have a record of its maintenance and how it's being used?
- Do you use CO2 monitors?



Carbon dioxide monitors

People exhale carbon dioxide when they breathe out. If there is a build-up of CO2 in an area it can indicate that ventilation needs improving.

Use an NDIR monitor which gives a much better reading than some other monitors.

You can use them to:

- Monitor: Check the ventilation in that space
- Actively manage: People can open/close windows and vents based on the reading.

Listen to our podcast episode "The importance of good ventilation" for further information. Search for Leeds University Business School Research and Innovation Podcast. www.bitly.com/adaptingoffices



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