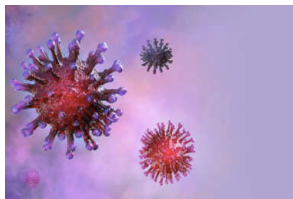


Safely re-occupying buildings following Lockdown



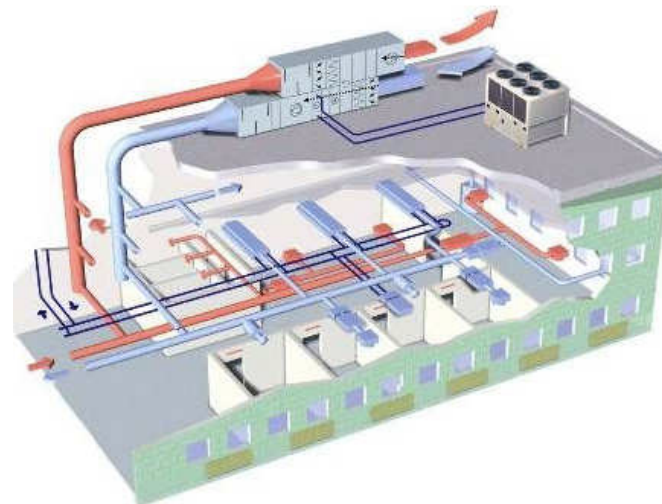
Julian Brunnock

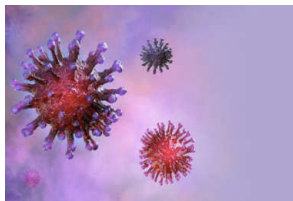
8th June 2020



Agenda

- Presentation Objectives
- Covid-19 transmission routes
- Management Responsibilities
- Practical measures for the safe operation of Building Services:
 - Why Ventilation is important
 - Ventilation systems
 - Supply & Extract systems
 - Demand Controlled Ventilation
 - Heat Recovery Ventilation
 - AHU Centralised Systems
 - Duct Cleaning
 - Air Filters
 - Ventilation Grilles
 - Extract only systems
 - Split Systems
 - Fan Coil Units
 - Chilled Beams
 - Natural Ventilation
 - Automated Window/Vents
 - Openable Windows
 - Room Air purifiers/filtration



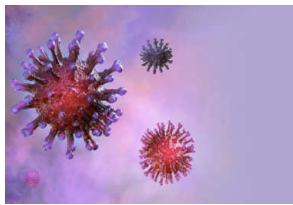


Agenda

Other Building Systems

- Water Systems
 - Electrical Safety Checks
 - Gas Safety Checks
 - Emergency Systems
 - Emergency Exit & means of escape
 - Emergency Lighting
 - Lifts and Escalators
 - Access Control & Security Systems
 - Portable Appliances
 - Specialist Services
-
- Summary
 - Q & A



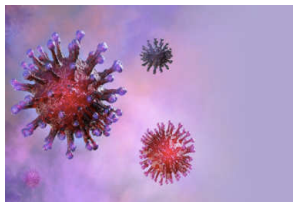


Emerging from Lockdown Objectives



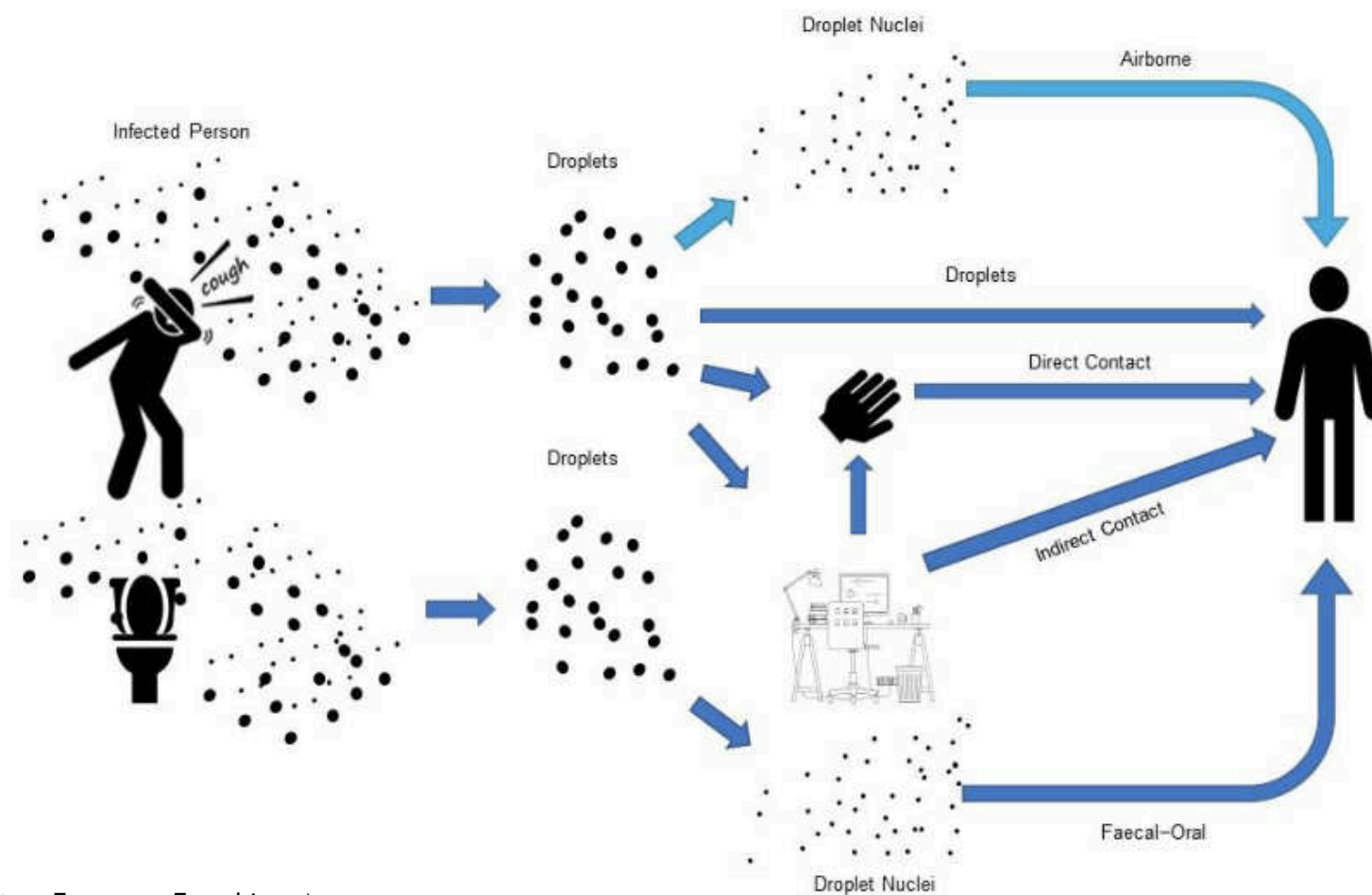
- The objective of these measures is about preventing contamination and protecting public health, as this is deemed more important than thermal comfort at this time.

- To give business owners and managers an outline of the main areas that need to be considered concerning both safe working practices and the assessment of building services.
- To provide an understanding of the safe practical measures associated with the operation of Mechanical services systems (Air Handling Units, Heat Recovery Units, Fan Coil units, etc) during re-occupation.

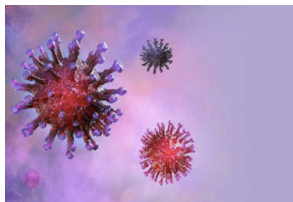


Emerging from Lockdown

COVID-19 transmission routes

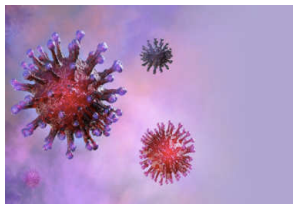


(figure: courtesy Francesco Franchimon)



Management Responsibilities





Practical measures for the safe operation of Building Services

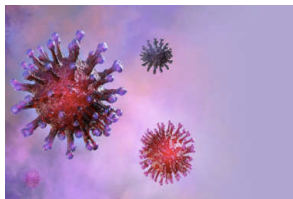


The information provided in this presentation is a detailed view of recommendations provided by leading industry bodies with regard to minimising the risk of spread of Covid-19 through Building Services systems.

- The Federation of European Heating, Ventilation and Air Conditioning Associations (**REHVA**)
- The Chartered Institute of Building Services Engineers (**CIBSE**)
- The Building Services Engineering Association (**BESA**)

Recommendations also endorsed by REFCOM and the Institute of Refrigeration

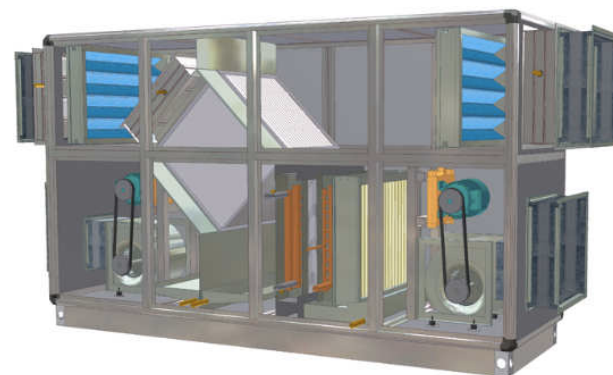
The objective of these measures is about preventing contamination and protecting public health, as this is deemed more important than thermal comfort at this time.



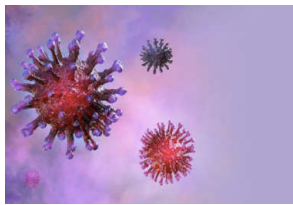
Practical measures for the safe operation of Building Services

Detailed review of the following systems

- Why Ventilation is important
- Ventilation systems
- Supply & Extract systems
- Demand Controlled Ventilation
- Heat Recovery Ventilation
- AHU Centralised Systems
- Duct Cleaning
- Air Filters
- Ventilation Grilles



- Extract only systems
- Split Systems
- Fan Coil Units
- Chilled Beams
- Natural Ventilation
- Automated Window/Vents
- Openable Windows
- Room Air purifiers/filtration



Emerging from Lockdown



Summary

The government guidance reminds employers of their legal responsibility for the safety of those entering workplaces:

*“To help you decide which actions to take, you need to carry out an appropriate **COVID-19 risk assessment**, just as you would for other health and safety related hazards. This risk assessment must be done in consultation with unions or workers.”*