

HEALTH TECHNICAL MEMORANDA (HTM)

- 2050 Risk management in the NHS estate
- 2025 Ventilation in healthcare premises
 - § Management policy
 - § Design considerations
 - § Validation and verification
 - § Operational management

2025 Ventilation in healthcare premises

- Ventilation is provided in healthcare premises for the comfort of the occupants
- Its function is to closely control the environment and air movement of space that it serves
- To reduce the hazard to patients and staff from airborne contaminants such as dust & harmful micro-organisms
- Ventilation system themselves present little danger but they have the potential to transmit hazards
- All ventilation systems should be subjected to an inspection, service and maintenance scheme at least every half-year
- An annual review of the operation of the plant should be undertaken
- Air conditioning and ventilation plant and its ductwork should be inspected at the access point(s) annually to see that it is clean and to monitor its general condition. After several years in service, even in the case of a correctly filtered plant, there may be signs of dirt accumulation and consideration should be given to cleaning the system
- Maintenance schemes should consist of the following:
 - § a visual inspection to determine the condition of the plant
 - § cleaning of all parts of the system that handle unfiltered air. This should include air intakes and extract grills
 - § disinfection of all sections that are known to become damp in normal use.



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HEALTH TECHNICAL MEMORANDA (HTM) continued

- **Bacteriological Sampling - General Ventilation Systems**

5.32 Bacteriological sampling will not normally be required for either general or local exhaust ventilation (LEV) systems unless otherwise specified.

Operating Rooms

5.33 The level of airborne bacteria introduced by the supply air can be checked by closing all doors and leaving the operating room empty with the ventilation system running for one hour, after which a bacterial sampler mounted on the operating table should be activated remotely. Aerobic cultures or non-selective medium should not exceed 35 bacterial and/or fungal particles per cubic metre of ventilating air.

5.34 The results should be examined to establish the broad category of organisms present. A high preponderance of fungal organisms may be an indication of inadequate filtration for the particular installation.

Precise guidance is inappropriate for the above on local circumstances and will depend on local circumstances.

5.35 A check of airborne bacteria during a surgical operation should be carried out as soon as possible after handover. Unless there are unusually high numbers of personnel or activity in the room, the number of airborne bacteria and/or fungi CFU's averaged over any five minute period, should not exceed 180 per cubic metre. The nominated infection control officer or consultant microbiologist if not the same person should carry out this work.



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