Ventilation Risk Assessment Tool

**Key control measures**

## Open windows

Airborne communicable diseases can be spread by small particles emanating from an infected person’s airway that can remain suspended in the air for a long time, get mixed throughout a room and build up over time. This means it is very important to enhance ventilation whenever possible.

* Open windows before meetings start and leave them open afterwards (being mindful of security aspects when the room/building is not occupied).
* Do not have meetings or work with others in a room that has no obvious source of outdoor air or where experience has shown the room can become ‘stuffy’ or uncomfortable when in use.
* To maximise air flow when draughts are not a concern, both high- and low-level windows should be opened together (when available).
* Where windows are available on multiple room facades these should be opened together to increase air flow.
* Ask everyone to dress in preparation for the reduced temperatures.
* In winter months or inclement weather when draughts are a concern, open high-level windows only as incoming air will be warmed as it flows into the room.
* In cooler months windows only need to be opened slightly to deliver the same air flow as wide-open windows in warmer weather.
* Furniture should be moved away from open windows and draughts if possible.
* Display posters to remind room users to open windows.

## Reduce room density

**Denser room occupancy increases sources of aerosol**

* Consider using larger spaces for meetings that are currently not being used e.g. seminar rooms, lecture theatres. Always select the biggest room available.
* Ensure that where in-person meeting takes place only those required to attend are present.
* Where possible, ensure that those who do not regularly mix limit closer contact time. Encourage people to arrive promptly/move on quickly so that rooms can be well ventilated (purged) before the next use.
* Occupancy numbers should ensure that a degree of social distancing can be maintained.
* In high risk areas occupancy will be limited e.g. unventilated/poorly ventilated spaces.
* Display signs in each space to communicate maximum occupancy levels to users.,
* All larger gatherings should be planned with a degree of social distancing (greater than pre-pandemic). In all rooms this may have a severe impact on capacity, especially where seating is fixed.

## Reduce occupancy time in rooms

Over the course of a day’s use, aerosol builds in a room.

* Ensure that rooms are not put into continuous use (without any gaps in occupation) and timetable sessions with ventilation gaps where occupancy is minimal, to allow a fresh air supply into the space (purging).
* Encourage persons to leave areas for break times and lunch to allow for purging of the workspace.

## Face Masks

Face masks dramatically reduce the amount of aerosol in a space.

1. Strongly advise and encourage wearing a face mask when inside.
   * The use of face masks is strongly recommended in all internal multi occupancy areas; they can be removed, but with an ongoing consideration for others who may prefer to use them; this includes if you meet with others in close proximity, and/or in smaller rooms, where it would be courteous to ask if others are comfortable for you not to wear a face mask.
   * In addition, you should consider continuing to wear face masks if:
2. Other mitigating factors such as a degree of social distancing (high density areas/crowds) or adequate ventilation is compromised.
3. When moving around buildings/rooms in multiple occupation.
4. Where your own risk assessment identifies you should wear appropriate PPE (providing additional personal protection to you as well as to others)
5. Notices displayed to encourage continued use of face masks
6. If face masks are removed surfaces such as desks will have increased surface contamination. Ensure that cleaning materials are provided, and encouragement/instruction is given to all room users to have responsibility to clean surfaces and contact points after use. This will minimise the risk of transmission of disease via surfaces and touchpoints.

## Mechanical ventilation

Some rooms/buildings have mechanical ventilation. This can be beneficial due to larger number of air changes compared to a naturally ventilated space.

Please complete the ventilation risk assessment tool below, with details of each room that you are assessing.

**Risk Assessment Tool – Multi-occupancy spaces**

***This tool is an indicator and provides a guide to risk factors. It may be necessary to increase control measures at any point if work-place transmission is evident.***

Risk assessment tool for assessing physical space – Hands, Face, Space, Ventilation, Duration

Ventilation cannot be assessed without first ensuring that other key control measures are in place.

1. **Hands**

|  |  |  |
| --- | --- | --- |
| **Control measure** | **Score** | **Notes** |
| Hand sanitiser/washing  facilities in place/visual reminders in place | 0 |  |
| No hand sanitiser available/no handwashing  facilities at all/no visual reminders | +10 |  |

1. **Face**

Select the option for the majority of occupants in the space

|  |  |  |
| --- | --- | --- |
| **Control measure** | **Score** | **Notes** |
| FFP3 mask/half mask with filter (un-valved)/air-fed hood | -10 |  |
| Any face mask | 0 |  |
| No face masks worn | +20 |  |

1. **Space**

This relates to the physical distance between people in the space for the majority of the time. Please refer to Appendix 1 of the Operational Behavioral RA (attached) for maximum room capacities.

|  |  |  |
| --- | --- | --- |
| **Control measure** | **Score** | **Notes** |
| >5m | 0 |  |
| 1-5m | +5 |  |
| <1m | +10 |  |

1. **Ventilation**

|  |  |  |
| --- | --- | --- |
| **Control measure** | **Score** | **Notes** |
| Mechanical ventilation with HEPA filtration | 0 | There are none in College |
| Mechanical ventilation – supplied from fresh air feed | 0 | Teaching Room – D10  D04 Meeting Room |
| Openable windows/doors –  natural ventilation | +5 | Upper Hall 1 & 2, SCR, Music & Gaskoin Rooms, Stapleton Room, Walker Rooms, MCR, JCR, DeSmith Room and OSCR |
| Mechanical ventilation – recirculated air/fresh air mix | +10 | Library incl. the basement rooms and the Auditorium only |
| Mechanical ventilation – completely recirculated air (including recirculating air conditioning units) | +15 | Gordon Cameron Theatre, Wilson Ct Meeting Rooms & Common Room, Reddaway Room, and Trust Room |
| No ventilation (internal space or no opening windows) | +15 |  |

1. **Duration – In multiple occupation**

|  |  |  |
| --- | --- | --- |
| **Control measure** | **Score** |  |
| < 15 minutes | 0 |  |
| 30 minutes max | +5 |  |
| 60 minutes max | +10 |  |
| 90 minutes max | +15 |  |
| >90 minutes | +20 |  |

1. **Mitigating factors** (please use all that apply)

|  |  |  |
| --- | --- | --- |
| **Control measure** | **Score** | **Notes** |
| Air changes per hour above 10 (if known) | -20 | Not Known |
| Room left empty for 10 minutes prior to occupation with mechanical ventilation that includes outside air running. | -15 |  |
| Room left empty for 10 minutes prior to occupation with only  ventilation from open windows | -10 |  |
| Static use (minimal movement –  people sat at desks i.e. office, lecture etc.) | -5 |  |

**7. Additional Risk factors** (please use all that apply)

|  |  |  |
| --- | --- | --- |
| **Control measure** | **Score** |  |
| Low aerosol generating activity e.g. lecture/training | +5 |  |
| Medium aerosol generating  activity e.g. meeting with discussion, eating | +5 |  |
| High aerosol generating activity e.g. singing, wind instruments, voice projection, drama, loud speaking (e.g. speaking  over loud machinery) | +10 |  |
| Aerobic activity i.e. Gym | +15 |  |

**Essential Information:**

Name and location of the Room, and reason for room use ……………………………………………………

## RA - Calculation

|  |  |
| --- | --- |
| **Section** | **Score** |
| 1. Hands |  |
| 2. Face |  |
| 3. Space |  |
| 4. Ventilation |  |
| 5. Duration |  |
| 6. Mitigating Factors |  |
| 7. Additional risk factors |  |
| **Total** |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Assessor name** | **Signature** | **Authoriser name** | **Signature** |
|  |  |  |  |
| **Date** |  | **Date** |  |

|  |  |
| --- | --- |
| **Action needed** |  |
| **Low risk** | 1. Record the findings on your risk assessment. Ensure that this is signed by the assessor 2. Ensure that all control measures are clearly communicated to room users with signage. |
| **Medium risk** | 1. 1. Record the findings on your risk assessment. Ensure that this is signed by the assessor. 2. 2. Consider changing control measures in the tool and recalculate. 3. 3. Ensure that all control measures are clearly communicated to room users with signage. |
| **High risk** | 1. 1. Demonstrate that you have taken steps to move from ‘High Risk to Medium Risk’ or taken additional mitigations to reduce the risk appropriately, before proceeding with the decision to hold your event when it is ‘High Risk’. 2. 2. Consider an alternative room, amending other criteria to ensure the score is in the Medium Risk category, or cancelling the event on the grounds of it not being safe to proceed. 3. 3. If you require the use of a CO2 monitor, please contact the Domestic Bursar. |

|  |  |
| --- | --- |
| **Risk rating** | **Score** |
| **Low** | **<35** |
| **Medium** | **35-50** |
| **High** | **50+** |