GENERAL HEALTH AND SAFETY RISK ASSESSMENT FORM

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| Site | **Teaching Lab in Collaborative Teaching Laboratory (CTL) Building** | **Department** | **College of Engineering & Physical Sciences** | | **Version / Ref No.** | **7** |
| **Activity Location** | **Collaborative Teaching Laboratory (CTL) Building** | **Activity Description** | **Maximum building user utilisation 250. Maximum CTL staffing 30 and Teaching Academic staff plus demonstrators 20.** | | | |
| **Assessor** | **Mala Patel** | **Assessment Date** | **14/04/2021** | **Date of Assessment Review** | **14/05/2021** | |
| **Academic / Manager Name** | **Prof. Jonathan Seville / Mala Patel** | **Academic / Manager Signature** |  | | | |

| Hazard Assessment | | | | | Control Assessment | | | | | | | | | | Actions | | | |
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| Hazard Category | Hazards Identified | Who might be harmed?  Staff  Students  Contractors  Others | How might people be harmed? | Existing Control Measures | | Initial Risk Rating | | | Are these adequate?  Yes/No | Changes to/ Additional Controls | Residual Risk Rating | | | Owner | | Due  Date | Action Complete |
| S | L | R | S | L | R |
| Organisational | Psychological wellbeing | Staff Students and Visitors | Anxiety and stress caused by concerns around returning to work and studies on Campus | Regular communication is in place (individual and group) via *team meeting, one to one meetings, health and safety committees/forums (includes email, ‘All staff’ meetings and 121 discussions with their line manager)* to ensure staff and students are not ill-informed about returning to work/study safely.  Advice is shared with staff members and students and they have been fully briefed and kept up to date with current advice on staying protected through the University’s lines of communications (i.e. line managers, Internal Comms) and shared with staff via *team meeting, one to one meetings, health and safety committees* and the University’s Coronavirus FAQs [click here](https://intranet.birmingham.ac.uk/staff/coronavirus/faqs-for-staff.aspx).  Risk assessments shared and an electronic copy is available on the *CTL Shared Drive (K)/Health & Safety/ CTL COVID RAs/COVID RAs*  New workplace/controls put in place to reduce risk of exposure to COVID 19 are documented in procedures  and policies and disseminated to employees through Line Managers and staff. These include:   * ***Social distancing: General guidance for staff and students*** * ***Social distancing: Buildings adaptations guidance*** * ***Social distancing***: ***Product solutions booklet*** * ***Social distancing: Building checklist*** * ***On-line induction materials for returning to campus***: combination of the guidance and videos.   <https://intranet.birmingham.ac.uk/staff/coronavirus/essential-resources-and-checklist.aspx>   * ***Return to Campus COVID-19: Building Risk Assessment* (This completed Risk Assessment)**   Line managers are aware of how big changes to working arrangements may cause additional work-related stress and affect their employees’ mental health and wellbeing and individuals have been made aware via CTL induction, team meeting, All Staff meetinsg, one to one meetings, health and safety committeesof guidance available in relation to this:  <https://www.hse.gov.uk/stress/>  <https://intranet.birmingham.ac.uk/staff/coronavirus/Coronavirus-wellbeing-support.aspx>  <http://www.selfhelpguides.ntw.nhs.uk/birmingham/leaflets/selfhelp/Stress.pdf> | | 2 | 2 | 4 | Yes |  |  |  |  |  | |  |  |
| Organisational | Psychological well being | Staff | Anxiety and stress caused by concerns around returning to work on Campus | Managers hold regular informal discussions during meeting with their team and look at ways to reduce causes of stress.  Concerns on workload issues or support needs *are* escalated to line manager; staff will inform their line managers in 121 or team meetings.  Staff who were previously advised by Occupational Health or a medical professional (including a midwife in respect of pregnancy) ***not*** to work on campus, have had arrangements made to ensure they do not return to working on campus until such time as advised by Occupational Health.  Staff who are in the [clinically extremely vulnerable group](https://www.gov.uk/government/publications/guidance-on-shielding-and-protecting-extremely-vulnerable-persons-from-covid-19/guidance-on-shielding-and-protecting-extremely-vulnerable-persons-from-covid-19#what-will-change-from-1-august) (i.e. those previously advised to shield), have had arrangements made to work from home, where possible, for the duration of the roadmap as per the Government advice. Where this is not possible, managers have discussed possible options with the individuals regarding working on campus. Prior to working on campus, staff in this category have been referred to Occupational Health for review using the specific Covid-19 Occupational Health referral form is available [here](https://intranet.birmingham.ac.uk/hr/wellbeing/index.aspx).  Staff who are clinically vulnerable (any of the conditions detailed on the Government’s guidance page, available [here](https://www.gov.uk/government/publications/staying-alert-and-safe-social-distancing/staying-alert-and-safe-social-distancing-after-4-july#clinically-vulnerable-people)) have discussed their working arrangements and the requirement for on campus presence, with their line manager to consider how they can continue to work safely including working from home. Where people cannot work from home previous returning to working on campus assessments undertaken in Autumn 2020 have been reviewed to ensure that no significant factors have changed in the intervening period. If there have been any changes then a new review has been undertaken. If there have been no significant change in factors, the previous assessment and any prior mitigating actions agreed (where they are still relevant) have been applied.  Existing risk assessments including those for new or expectant mothers reviewed and revised to reflect new working arrangements. Reasonable adjustments made, including those needed for PEEPs especially in relation to who will assist with their evacuation in an emergency, to avoid staff that require them including disabled workers being put at a disadvantage.  Employees invited to return back to work on Campus who have concerns about either continuing to work on Campus or working from home/remotely have discussed these with their line manager either using the [University’s Covid-19 Return to Campus Discussion Form](https://intranet.birmingham.ac.uk/hr/documents/public/Wellbeing/Covid-19-Return-to-Campus-Discussion-Form.docx) or an alternative method whereby concerns have been formally recorded and where necessary an occupational health referral has been made using a standard Management Referral available via the HR Portal.  Employees are made aware of support mechanisms available to them (e.g. counselling, occupational health, HR, etc.) through line managers, internal communications and University webpages:  <https://intranet.birmingham.ac.uk/staff/coronavirus/faqs-for-staff.aspx>  <https://intranet.birmingham.ac.uk/hr/wellbeing/index.aspx>  <https://intranet.birmingham.ac.uk/hr/wellbeing/workhealth/index.aspx>  This link is for students:  <https://intranet.birmingham.ac.uk/student/coronavirus/Wellbeing.aspx> | | 2 | 2 | 4 | Yes |  |  |  |  |  | |  |  |
| Biological | Virus transmission | Staff Students and Visitors | Exposure to respiratory droplets carrying COVID-19 from an infectious individual transmitted via sneezing, coughing or speaking | ***Social distancing: The CTL Building checklist***has been completed to identify the control measures to consider reducing the risk of workplace infections.  Staff work using the mixed model of site and home based as agreed with line manager, in line with Government and University guidance.  Managers/supervisors ensure staff and students with any form of illness do not attend work/campus until the illness has been verified as not being Covid-19.  Managers/supervisors keep track of when staff and students can return to work/ Campus after the symptom free period.  Regular access to the Lateral Flow Device screening tests provided to staff and students who are coming onto campus.  The University’s [***On-line induction materials for returning to campus***](https://intranet.birmingham.ac.uk/staff/coronavirus/essential-resources-and-checklist.aspx) combination of the guidance and videos have been provided and completed for all staff working in University buildings*.*  To help with consistency and adherence to building specific measures such as access routes, occupancy limits etc. staff from other departments accessing the building (such as cleaning and Estates) have received a building specific induction including information and on site induction.  Schedules for essential services and contractor visits revised to reduce interaction and overlap between people and building managers and occupants informed of when the visits will take place and which services are being maintained e.g., carrying out services on Wednesday afternoon or out of term time.  Un-essential trips within buildings and sites discouraged and reduced, e.g. building access restricted via card access, staff use of virtual platforms, radios or telephones encouraged ensuring cleaning them between use. | | 3 | 2 | 6 | Yes |  |  |  |  |  | |  |  |
| Environmental | Virus transmission in the workplace due to lack of social distancing | Staff Students and Visitors | Exposure to respiratory droplets carrying COVID-19 from an infectious individual transmitted via sneezing, coughing or speaking. | Only work authorised and approved by the Government and University is permitted in University buildings.  Workplace routines changed to ensure room/building capacity calculated to maintain at least 2m social distancing is not exceeded including:   * Change to peak staff entry and exit times. Staff have staggered their start and finish times. * Changes to core working hours. Staff will completed their scheduled work and leave work working rather than adhering to their contracted hours. * Arrival and departure times at work have been staggered to reduce crowding into and out of the workplace, taking account of the impact on those with protected characteristics.   To help contain clusters and outbreaks and assist the University with any requests for data by the NHS Test and Trace service a temporary record of shift patterns and teams and attendance in the building is kept for 21 days.  Procedure in place for dealing with instance of unexpected individual e.g. CTL staff or COVID Marshal will monitor the building and refused entry or ask indidvuals to leave the building.  Work has been arranged so that staff are able to maintain the government guidelines for social distancing based on our industry which are included in the ***Social distancing: The CTL Building checklist***  (The latest Guidance on these measures can be found by clicking the following link [Social Distancing Guidelines](https://www.gov.uk/guidance/social-distancing-in-the-workplace-during-coronavirus-covid-19-sector-guidance#shops-running-a-pick-up-or-delivery-service)).  Due to the potential increased risk of transmission from aerosol transmission steps have been taken to avoid people needing to unduly raise their voices to each other e.g. not playing music or broadcasts at a volume that makes normal conversation difficult, using microphones during teaching.  One-way flow systems implemented and visual aids, such as floor strips, signage are used for maintaining social distancing two metres distance throughout the building/workplace.  Staff activities are segregated to promote the 2m social distancing rules including:   * Reduction of teaching lab occupancy * Work stations moved or staff relocated. Provision of additional screens where needed to segregate people. Desks are arranged with employees facing in opposite directions. Display Screen Equipment (DSE) assessments reviewed and revised. * Provision of additional screens where needed to segregate people. * Areas of work marked out with floor tape to ensure adequate social distancing is in place. Visual management aids in place to remind people of the need for social distancing.   Headcount capacity to ensure social distances standards have been achieved have been set and   * displayed in shared rooms e.g. open plan offices, meeting rooms, seminar rooms and laboratories. * Capacity limits have been set for common facility areas e.g. toilets, welfare areas and kitchen area etc. * Staff encouraged to remain on-site including bringing their own lunch and, when not possible, maintaining social distancing while off-site. * Where available safe outside areas used for break. * Welfare areas for serving hot food or drinks have been assessed in accordance with government guidance and tables/seating from welfare areas moved to create 2m social distancing separation and avoid large groups congregating. Smaller kitchens use a one out one in policy and floor marking to ensure social distancing. All users are encouraged to wash their hands prior to using equipment (kettle) and to wash their hands after use. Additional signage for the correct method for handwashing displayed. All drinking water fountains have been taken out of use. * Social distancing is marked on the corridor floor prior to entry to the WCs (toilets). Building users are reminded to leave the facilities in a respectable condition.   All corridors are :   * Marked in areas to ensure social distancing is adhered to (lines on floor). * Have a one way system around the building. * Corridors that are over 2 m wide have a two way system of use, people using the corridor must stay to their left.   Additional signage in corridors reminding staff about social distancing.  Information provided and signs displayed informing people to use the stairwells rather than lifts unless they have difficulty using the stairs. The maximum occupancy of the lift has been reduced to one and social distance marked on the floor. Users are encouraged to stand side by side or back to back. Once users have left the lift posters are displayed to encourage them to wash their hands and avoid touching their face.  Goods Lift (maximum occupancy of the lift of two) are still to be used to move heavier / larger / hazardous goods as a planned operation ensuring the lift cannot be stopped on each floor or staff placed on each floor to prevent access to lift until equipment moved.  There are designated stairwell for going up and a designated stairwell for coming down, this system will be enforced.  Buildings with a single stairwell or stairwells over 2m are separated down the centre to try and achieve social distancing. Building users using these stairwells have been informed via the CTL COVID induction and signage to announce themselves prior to use and to keep to the left.  Additional signage in stairwells reminding staff about social distancing.  Wash hands / use hand sanitiser on exit from stairwell.  Social gathering amongst employees have been discouraged whilst at work including meetings where alternative arrangements have been provided e.g. virtual meetings  Large gatherings including University events organised in public outdoor spaces have been cancelled or postponed or alternative IT solutions provided – Virtual Open day tours ands events. (Critical Training courses may still be performed but only following the Government and University Covid-19 guidance.)  Large gatherings including events in public outdoor spaces that are organised by the University that are unable to be provided by alternative IT solutions are only permitted with steps to mitigate the risk of transmission and in line with COVID-19 Secure guidance including the completion of a specific risk assessment.  <https://www.gov.uk/guidance/working-safely-during-coronavirus-covid-19>  Managers perform frequent evaluation against social distances controls. Line managers will observe staff and the implementation of the Non- compliance escalation process will allow the CTL COVID marshals will be shared with line managers. Staff are reminded by line managers and their colleagues on a daily basis of the importance of social distancing both in the workplace and outside of it.  COVID marshals within the building, will also monitor compliance against the COVID Secure measures and will implement the Escalation Process, if compliance of the COVID safe measures is breached.  Near-miss reporting is encouraged to identify where controls cannot be followed or people are not doing what they should.  Only work authorised and approved by the Government and University is permitted in University buildings. Where the 2m social distancing guidelines cannot be followed in full in relation to a particular activity, accessing teaching resources from storageconsideration has been given to whether that activity needs to continue, and, if so, all the mitigating actions possible to reduce the risk of transmission between staff have been included in a task specific risk assessment and are being taken. Mitigating actions include:   * Further increasing the frequency of hand washing and provision of hand sanitiser and surface cleaning. * Keeping the activity time involved as short as possible. * Using screens or barriers to separate people from each other. * Using back-to-back or side-to-side working (rather than face-to-face) whenever possible. * Reducing the number of people each person has contact with by using ‘fixed teams or partnering’ (so each person works with only a few others). * Re-engineering the technical activity to avoid congestion * Improving ventilation by re-organising the indoor space to optimise the ventilation available. * Individuals (including staff, students, visitors and contractors), unless exempt, are required to wear face coverings, inside University buildings where 2m social distancing isn’t possible and cannot be maintained. Information provided in the University and local communications and local inductions and signs displayed informing people of the mandatory requirement to wear a face covering within the building. * No working in close proximity to people and in particular a person’s face, mouth and nose, for an extended period of time (the majority of the working day) is permitted unless the work is essential such as in clinical settings, like a hospital, or other close contact roles for example, Occupational Health clinical services where there is an activity specific risk assessment and PPE is provided for individuals undertaking this work.   Individuals (including staff, students, visitors and contractors), unless exempt, are required to wear face coverings, inside all University buildings at all times except where there is reasonable justification for not wearing them e.g. in single occupancy rooms, in multi-occupancy staff workplaces where there is over 2m social distancing between staff and good ventilation, where it impacts on teaching and learning activities. Information provided in the University and local communications and local inductions and signs displayed informing people of the mandatory requirement to wear a face covering within the building.  Individuals have been reminded through the CTL CVOD induction and regular basis in 121 and team meetings of how to use face coverings safely including the following:  When wearing a face covering you should:   * wash your hands thoroughly with soap and water for 20 seconds or use hand sanitiser before putting a face covering on * avoid wearing on your neck or forehead * avoid touching the part of the face covering in contact with your mouth and nose, as it could be contaminated with the virus * change the face covering if it becomes damp or if you’ve touched it * avoid taking it off and putting it back on a lot in quick succession (for example, when leaving and entering buildings)   When removing a face covering:   * wash your hands thoroughly with soap and water for 20 seconds or use hand sanitiser before removing * only handle the straps, ties or clips * do not give it to someone else to use * if single-use, dispose of it carefully in a residual waste bin and do not recycle * if reusable, wash it in line with manufacturer’s instructions at the highest temperature appropriate for the fabric * wash your hands thoroughly with soap and water for 20 seconds or use hand sanitiser once removed   PPE consisting of face masks and/or a clear visor/shields that covers the face, and provides a barrier between the wearer and others, provided for staff working in close proximity to people and in particular a person’s face, mouth and nose, for an extended period of time (the majority of the working day). Re-usable visors are cleaned and sanitised regularly using normal cleaning products.  • Student will have been provided with personal lab coats and they are responsible for cleaning and location.  •Staff will be assigned their personal lab coats will be laundered in the CTL on weekly basis.   * Individuals (including staff, students, visitors and contractors), unless exempt, are required to wear face coverings, inside University buildings where 2m social distancing isn’t possible and cannot be maintained. Information provided in the University and local communications and local inductions and signs displayed informing people of the mandatory requirement to wear a face covering within the building. Lecturers are asked to request students leave if they are not wearing a face covering and are not exempt.   Adequate training has been provided on what PPE is required i.e. gloves, masks, aprons, Filtering Face Pieces (P3), goggles, the correct donning/doffing of PPE and face fit testing. Government advice is followed:  <https://www.gov.uk/government/collections/coronavirus-covid-19-personal-protective-equipment-ppe>  <https://www.gov.uk/government/publications/covid-19-decontamination-in-non-healthcare-settings/covid-19-decontamination-in-non-healthcare-settings>  PHE quick guides for correct donning and doffing of PPE for [non-AGPs.](https://www.gov.uk/government/publications/covid-19-personal-protective-equipment-use-for-non-aerosol-generating-procedures) as well as for[AGPs](https://www.gov.uk/government/publications/covid-19-personal-protective-equipment-use-for-aerosol-generating-procedures) has been utilised for examples in best practice for putting on and taking off (donning and doffing). | | 3 | 2 | 6 | Yes |  |  |  |  |  | |  |  |
| Biological | Suspected Case of CIOVID-19 | Staff Students and Visitors | Exposure to respiratory droplets carrying COVID-19 from an infectious individual transmitted via sneezing, coughing or speaking. | Response plan in place in the event of a confirmed or suspected case of COVID-19 and communicated and includes:   * If a person becomes unwell in the workplace with suspected COVID-19, they will be sent home in accordance to the University guidance. If any students appear unwell or make comment or complain to staff members that they are feeling unwell they will be asked to leave the building with immediate effect and to follow the University and Government advice. Managers will follow the NHS Test and Trace workplace guidance: <https://www.gov.uk/guidance/nhs-test-and-trace-workplace-guidance> * The area will be cleaned in accordance with the specific Government [guidance](https://www.gov.uk/government/publications/covid-19-decontamination-in-non-healthcare-settings/covid-19-decontamination-in-non-healthcare-settings) * Provision and monitoring of adequate supplies of cleaning materials are in place. * Team briefed team meeting and followed up by an email immediately on actions to be taken in the event of someone being suspected of having COVID-19. * Staff must tell their line manager if they develop symptoms. Absence will be managed in accordance to the University guidance provided. * Employees to follow the Government advice: <https://www.gov.uk/coronavirus> * Line managers will maintain regular contact with staff members during this time, in accordance with the University sickness absence guidance and monitor for signs of symptoms in the remaining workforce and keep Senior Managers informed of the situation whilst following the Government’s guidance for contact tracing: contact with co-workers: <https://www.gov.uk/guidance/nhs-test-and-trace-workplace-guidance> * If an individual tests positive for COVID-19 this will be managed in accordance with the University’s [Test, Trace and Protect Process](https://intranet.birmingham.ac.uk/staff/coronavirus/test-and-trace.aspx). * If multiple cases of coronavirus appear in a workplace, an outbreak control team from either the local authority or Public Health England will, if necessary, be assigned to help the University manage the outbreak. The University will seek advice from the local authority in the first instance. * Individuals will be told to isolate because they:   + have coronavirus symptoms and are awaiting a test result   + have tested positive for coronavirus   + are a member of the same household as someone who has symptoms or has tested positive for coronavirus   + have been in close recent contact with someone who has tested positive and received a notification to self-isolate from NHS test and trace.   <https://www.gov.uk/government/publications/covid-19-stay-at-home-guidance/stay-at-home-guidance-for-households-with-possible-coronavirus-covid-19-infection> | | 3 | 2 | 6 | Yes |  |  |  |  |  | |  |  |
| Biological | Someone entering the workplace with COVID-19 | Staff Students and Visitors | Exposure to respiratory droplets carrying and contact with an object that has been contaminated with COVID-19. | Companies who regularly attend or work in the building requested to provide their health and safety policy/arrangements / or RAMS (risk assessment and method statement) regarding COVID-19.  Anybody visiting site will be informed that they are not to enter if they’re experiencing COVID-19 symptoms or should be self-isolating under the government Guidelines.  If a person becomes unwell in a University workplace with suspected COVID-19, they will be sent home in accordance to their company’s and University’s guidance. University managers will follow the NHS Test and Trace workplace guidance for any University staff that may have come into contact with them: <https://www.gov.uk/guidance/nhs-test-and-trace-workplace-guidance> | | 3 | 1 | 3 | Yes |  |  |  |  |  | |  |  |
| Environmental | Virus transmission in the workplace | Staff Students and Visitors | Contact with an object that has been contaminated with COVID-19 and which subsequently transmits this to another person e.g. surfaces, any inanimate objects & touch points including work surfaces, work equipment, door handles, banisters, chair arms and floors. | Individuals have been instructed and are regularly reminded through signage and briefings their hands frequently with soap and water for 20 seconds and the importance of proper drying in accordance with the NHS Guidance:  <https://www.nhs.uk/live-well/healthy-body/best-way-to-wash-your-hands/>  Soap and water and hand sanitiser are provided in the workplace and adequate supplies are maintained and are placed at the entrance to the building and in other areas (entry and exit to buildings and each teaching lab and welfare areas) where they will be seen.  Individuals have been informed to check their skin for dryness and cracking and to inform their line manager or supervisor if there is a problem.  Individuals are reminded to catch coughs and sneezes in tissues – Follow: “Catch it, Bin it, Kill it” and to avoid touching face, eyes, nose or mouth with unclean hands. Posters are displayed around the workplace.  To help reduce the spread of coronavirus (COVID-19) individuals are reminded briefings of the public health advice:  <https://www.gov.uk/government/publications/coronavirus-outbreak-faqs-what-you-can-and-cant-do/coronavirus-outbreak-faqs-what-you-can-and-cant-do>  A review of the cleaning regime for the building/area to ensure controls are in place to keep surfaces clean and free of contamination has been undertaken, cleaning products and disposable cloths have been made available to all occupants and everyone has been briefed through the CTL COVID induction and briefings on the importance of keeping surfaces and work equipment clean.  Sharing of equipment is restricted where possible (additional auxiliary lab equipment and lab resources and consumables have been purchased, and cleaned / disinfected before and after use.  Equipment and all touch points or surfaces that are touched regularly will be frequently cleaned and disinfected before and after use.  Specialist Lab Equipment will be frequently cleaned and disinfected before and after use , according to SOPs could be the use anti-viral wipes /70% Ethanol /diluted Virkon/ disinfectant with disposable cloths. These will be discarded in the autoclave waste bin having ensured sufficient time for the alcohol to evaporate.  Sterilising chemicals and cloths are provided in the area to clean machines and equipment prior to the commencement of work and upon completion. If machines and equipment are shared, sterilising will be carried out between operations.  CTL staff will use anti-viral wipes /70% Ethanol /diluted Virkon/ disinfectant with disposable cloths are provided to clean machines (such as printers) and equipment prior to use and upon completion. Laptops will be utilised and staff will be instructed bring in their laptops daily.  Staff will assess the compatibility of the Sterilising chemicals and cloths are provided to clean machines (such as printers) and equipment prior to use and upon completion.  Objects and surfaces that are touched regularly are cleaned frequently using use anti-viral wipes such as door handles and keyboards, and making sure there are adequate disposal arrangements.  Internal doors that **are not** signed as fire doors (unless held open with a mechanical device) kept open whilst working (last person out shuts the doors) to prevent multiple people using door handles.  Use of hot desks and spaces avoided and, where not possible e.g. training facilities and study spaces, workstations are cleaned the users before and after usebetween different occupants including shared equipment.  There is clear desk policy in place to reduce the amount of personal items on desks and work benches to be practiced when the space is in use or not in use.  There are cleaning procedures for goods and merchandise entering the site. Greater handwashing and handwashing facilities have been introduced for workers handling goods and merchandise and hand sanitiser provided where this is not practical. Non-business deliveries stopped, for example, personal deliveries to workers.  Areas where people directly pass things to each other, for example office supplies, have been identified and ways to remove direct contact, such as using drop-off points or transfer zones have been introduced.  Everyone is encouraged regularly to keep personal items clean including washing spectacles with soap and water, clean phones, keyboards and shared machinery handles etc. before after and during work.  More storage for workers provided for clothes and bags e.g. lockers and staff encouraged in team meeting to use them.  Monitoring and supervision arrangements through the Non- compliance escalation process have been put in place to ensure people are following controls e.g. implementing the new cleaning regime, following hygiene procedures etc.  COVID-19 cleaning products used have a current valid chemical risk assessment in place and are used in accordance with all prescribed risk controls and monitoring requirements. They are stored so that they are readily available to all users and are labelled according to the Globally Harmonised System of Classification and Labelling (GHS). (See location specific chemical risk assessments for cleaning products used within the area).  All university staff are encouraged to avoid direct personal contact with others i.e. shaking hands etc. | | 3 | 2 | 6 | Yes |  |  |  |  |  | |  |  |
| Organisational | Exposure to Existing Hazards | Staff Students and Visitors | Increased risk of harm due to controls included in existing risk assessments & safety arrangements affected by COVID-19 measures | All relevant pre-existing (non COVID) risk assessments including lone working assessments and procedures have been reviewed to take into account the impacts of social distancing and other COVID counter measures.  PPE related risk assessments have been reviewed to ensure that PPE is provided on an individual basis. Usage is monitored to ensure suitable level of stock of certain PPE such as face masks etc. during this time due to global shortages. Individuals maintain their own equipment in a sterile condition. Storage has been reviewed to provide individual storage arrangements. The taking of PPE home is not permitted.  Emergency Procedures reviewed and revised including:   * **Communication**: people have been made aware through the CTL COVID induction that in an emergency, for example, an accident or chemical spill or fire, people do not have to stay 2m apart if it would be unsafe. * **Fire procedures:** number and details of nominated fire warden(s) in place, fire muster point confirmed *.* Required modifications to fire alarm practices and evacuation drills to cater for COVID-19 measures have been addressed; ensuring that the activity is still compliant with relevant building and fire codes. * **First Aid:** First aid needs assessment reviewed to take into account the impact of any Local or National Government requirements and any new Guidelines issued by the [University](https://intranet.birmingham.ac.uk/staff/coronavirus/faqs-for-staff.aspx) or [HSE](https://www.hse.gov.uk/), and first aid information including the location of first aid kits and first aider contact information up to date. * **Hygiene:** Washing facilities with soap/gel available People involved in the provision of assistance to others have been informed to pay particular attention to sanitation measures immediately afterwards including washing hands.   Safety critical roles will remain in place to aid safe operation. In the event of safety critical roles not being available then a dynamic risk assessment shall be performed by Mala Patel, Indira Suresh, Aruna Mistry and Cheryl Powell to ensure measures are introduced to mitigate risk (for example, another area within the building or campus could have a critical role such as first aider that could cover as a temporary solution).  Business continuity and disaster recovery plans updated based on COVID-19 implications including contingency plan in place for possible switch back to national or local lockdown.  Life-saving rules, will continue to be governed, enforced and communicated during COVID-19 especially during any Local or National Government lockdowns in particular “speaking up” if they witness any unsafe behaviours, conditions or symptoms related to COVID-19. | | 3 | 2 | 6 | Yes |  |  |  |  |  | |  |  |
| Environmental | Inbound & Outbound Goods including Post | Staff | Exposure to contact with an object that has been contaminated with COVID-19. | Logistics for the deliveries to the unit so that social distancing can be maintained at all times has been considered and include:   * Pick-up and drop-off collection points, procedures, signage and markings revised. * Unnecessary contact at delivery bay has been minimised e.g. non-contact deliveries where the nature of the product allows for use of electronic pre-booking. * Methods to reduce frequency of deliveries in place - ordering larger quantities less often. * Where possible and safe, single workers load or unload vehicles or if not possible the same pairs of people, with additional mitigating measures including the wearing of face coverings, are used for loads where more than one is needed. * Delivery and receipt confirmation made contactless and physical contact when handing goods over to the customer has been avoided. * Where possible all deliveries are stripped of all packaging (which is disposed of). * Strict hand washing procedure in place after handling all deliveries. * Where possible deliveries to remain isolated and untouched for a minimum of 48 hours. | | 3 | 2 | 6 | Yes |  |  |  |  |  | |  |  |
| Environmental | Virus transmission outside of the workplace | Staff Students and Visitors | Exposure to respiratory droplets carrying and contact with an object that has been contaminated with COVID-19. | On the outside / approach to the building there is signage to warn all prior to entering this building social distancing is in place.  There is signage advising individuals to wash their hands regularly and not to touch their face.  There is one door for access and one door for egress and one way systems are inforce in the building.  Building access control is used during all times in the building and for any Local or National Lockdown periods.  Controlled access and egress is monitored to ensure it is followed by monitoring the building users through the COVID marshals. | | 3 | 1 | 3 | Yes |  |  |  |  |  | |  |  |
| Organisational | Travelling to work | Staff | Exposure to respiratory droplets carrying COVID-19. | Workers encouraged to avoid public transport where applicable and use alternatives e.g. cycling, walking to work etc. Where staff are unable to avoid public transport they do so in accordance with Government and University Guidance:  <https://www.gov.uk/guidance/coronavirus-covid-19-safer-travel-guidance-for-passengers>  <https://intranet.birmingham.ac.uk/staff/coronavirus/faqs-for-staff.aspx> | | 3 | 2 | 6 | Yes |  |  |  |  |  | |  |  |
| Organisational | Driving at work | Staff | Exposure to respiratory droplets carrying and contact with an object that has been contaminated with COVID-19. | Non-essential travel is not permitted during the National Lockdown periods and is minimised at all other times – remote options considered first.  Staff roles that are required to car share have been considered and whether this could continue. Alternative solutions to two-person delivery have been put in place including delayed delivery of large items or using an alternative method, for example, mechanical / material handling equipment.  Where these are not possible the number of people travelling together in any one vehicle is minimised, using fixed travel partners, vehicles are well ventilated to increase the flow of air via open windows and occupants sit side by side or behind other people and sitting face-to-face is avoided. Seating arrangements to maximise distance between people in the vehicle has been considered and all of the occupants, unless exempt, wear face coverings inside the vehicles at all times.  Job and location rotation has been reduced.  Journeys have been scheduled and delivery/collection times to reduce contact with others.  Sufficient quantities of hand sanitiser /wipes are retained within vehicles to enable workers to clean hands after each delivery / drop-off.  Staff are encouraged to wash hands before boarding vehicles. | | 3 | 2 | 6 | Yes |  |  |  |  |  | |  |  |
| Mechanical | Machinery & Equipment | Staff Students and Visitors | Exposure to respiratory droplets carrying and contact with an object that has been contaminated with COVID-19. | Equipment and surfaces that are touched regularly will be frequently cleaned and disinfected.  Sterilising chemicals and cloths are provided in the area to clean machines and equipment prior to the commencement of work and upon completion. If machines and equipment are shared, sterilising will be carried out between operations by the user. | | 3 | 2 | 6 | Yes |  |  |  |  |  | |  |  |
| Environmental | Ventilation | Staff Students and Visitors | Exposure to airborne droplets carrying the virus | In the lab areas, recirculating air is not used. The extraction airflow combined with the reduction in lab occupancy means that the airflow is more than sufficient.  In non- lab areas, like the informal spaces and staff areas, recirculating air is used. Unfortunately, the recirculation of unfiltered air cannot be disabled as the ventilation system is linked to the Local Exhaust Ventilation operations and would lead to unstable system and a consider drop in the temperature of the building.  Ventilation systems are maintained in line with planned and preventative maintenance schedules, including filter changes.  An assessment of the ventilation in the building, and where necessary individual areas/rooms, has been undertaken which included checks such as:   * Is the space naturally or mechanically ventilated * All areas within the building which are usually occupied and have poor ventilation have been identified and the use of the area re-assessed (see below). * An assessment of Fresh air (ventilation) has been undertaken for the workplace and where necessary individual workspaces. This included how fresh air is provided (natural, mechanical or combination of both), how many people occupy/use the area, how much time people spend in the areas, how large the area is, what activities take place in the areas, the equipment and machinery in the workspaces, the use of fans and Local Exhaust Ventilation.   Mechanical ventilation has typically been set at maximum fresh air settings and operate 24/7 and that the plant running as commissioned due to the complex system; no additional strategy changes could be applied.  Building Management and or the Estates Helpdesk.  General considerations reflected on during reopening of the buildings in relation to the ventilation and fresh air to occupied spaces. Core strategy based on ‘[CIBSE Covid-19 Ventilation Guidance](https://www.cibse.org/knowledge/knowledge-items/detail?id=a0q3Y00000HsaFtQAJ)’, [REHVA guidance](https://www.rehva.eu/fileadmin/user_upload/REHVA_COVID-19_guidance_document_V4_09122020.pdf), [HSE guidance](https://www.hse.gov.uk/coronavirus/equipment-and-machinery/air-conditioning-and-ventilation.htm), [Government](https://www.gov.uk/guidance/working-safely-during-coronavirus-covid-19#shops-running-a-pick-up-or-delivery-service) and other relevant industry guidance. The guidance is constantly under review by the University’s Estates, as SARS-CoV2 transmission routes become more clearly defined, and any updated recommendations assessed and implemented where relevant to University systems.  Links used above:  <https://www.cibse.org/knowledge/knowledge-items/detail?id=a0q3Y00000HsaFtQAJ>  <https://www.rehva.eu/fileadmin/user_upload/REHVA_COVID-19_guidance_document_V4_09122020.pdf>  <https://www.hse.gov.uk/coronavirus/equipment-and-machinery/air-conditioning-and-ventilation.htm>  <https://www.gov.uk/guidance/working-safely-during-coronavirus-covid-19#shops-running-a-pick-up-or-delivery-service> | | 4 | 2 | 8 | YES |  |  |  |  |  | |  |  |
|  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |

**Risk Assessment Guidance**

Risk Scoring System

The scoring system is provided as a tool to help structure thinking about assessments and to provide a framework for identifying which are the most serious risks and why.

|  | **Consequence / Severity score (severity levels) and examples of descriptors** | | | | |
| --- | --- | --- | --- | --- | --- |
|  | **1** | **2** | **3** | **4** | **5** |
| **Domains** | **Negligible** | **Minor** | **Moderate** | **Major** | **Catastrophic** |
| **Impact on the safety of staff, students or public (physical / psychological harm)** | Minimal injury not requiring first aid or requiring no/minimal intervention or treatment.  No time off work | Minor injury or illness, first aid treatment needed or requiring minor intervention.  Requiring time off work for <3 days | Moderate injury requiring professional intervention  Requiring time off work for 4-14 days  RIDDOR / MHRA / agency reportable incident | Major injury leading to long-term incapacity/ disability (loss of limb)  Requiring time off work for >14 days | Incident leading to death  Multiple permanent injuries or irreversible health effects |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Likelihood score** | **1** | **2** | **3** | **4** | **5** |
| **Frequency** | **Rare** | **Unlikely** | **Possible** | **Likely** | **Almost certain** |
| **Broad descriptor** | This will probably never happen/occur | Do not expect it to happen/occur but it is possible it may do so | Might happen or occur occasionally | Will probably happen/occur but it is not a persisting issue | Will undoubtedly happen/occur, possibly frequently |
| **Time-framed descriptor** | Not expected to occur  for years | Expected to occur  at least annually | Expected to occur at  least monthly | Expected to occur at least weekly | Expected to occur at least daily |
| **Probability**  Will it happen or not? | <0.1 per cent | 0.1–1 per cent | 1.1–10 per cent | 11–50 per cent | >50 per cent |

The overall ***level of risk*** is then calculated by multiplying the two scores together.

**Risk Level = Consequence / Severity x Likelihood (C x L)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Likelihood** | | | | |
| **Likelihood score** | **1** | **2** | **3** | **4** | **5** |
|  | **Rare** | **Unlikely** | **Possible** | **Likely** | **Almost certain** |
| **5 Catastrophic** | 5 | 10 | 15 | 20 | 25 |
| **4 Major** | 4 | 8 | 12 | 16 | 20 |
| **3 Moderate** | 3 | 6 | 9 | 12 | 15 |
| **2 Minor** | 2 | 4 | 6 | 8 | 10 |
| **1 Negligible** | 1 | 2 | 3 | 4 | 5 |

The Initial Risk Rating is the level of risk before control measures have been applied or with current control measures in place.

The Residual Risk is the level of risk after further control measures are put in place.