**RISK ASSESSMENT FORM**

[**Guidance**](#_COMPLETING_THE_RISK) **on how to complete this form is available at the end of the document. Further information on risk assessment is available via the Safety Advisers Office intranet and the** [**Health and Safety Executive**](https://www.hse.gov.uk/risk/index.htm)

|  |  |
| --- | --- |
| **School/Department: Central Teaching Laboratories** | **Building: CTL** |
| Task / Activity: health and safety implications of building reoccupation during/following covid 19 outbreak  |
| **Persons who can be adversely affected by the activity: Staff** |
| **Date of Assessment: 13/01/2022 Assessment aimed at Semester 2** |
| **Person(s) Undertaking Assessment:** Stephen Chappell |

**Section 1: Is there potential for one or more of the issues below to lead to injury/ill health (tick all relevant boxes)**

**People and animals/Behaviour hazards**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Allergies |  | Too few people | X | Horseplay |  | Repetitive action |  | Farm animals |  |
| Disabilities | X | Too many people | X | Violence/aggression | X | Standing for long periods |  | Small animals |  |
| Poor / lack of training | X | Non-employees | X | Stress | X | Fatigue |  | Physical size, strength, shape |  |
| Poor / lack of supervision | X | Illness/disease | X | Pregnancy/expectant mothers | X | Awkward body postures |  | Potential for human error | X |
| Lack of experience | X | Lack of insurance |  | Static body postures |  | Lack of / or poor communication |  | Taking short cuts |  |
| Children |  | Rushing | X | Lack of knowledge | X | Language and terminology |  | Vulnerable adult group | X |

**What controls measures are in place or need to be introduced to address the issues identified?**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Identified hazards**  | **What controls are currently planned or in place to ensure that the hazard identified does not lead to injury or ill-health?** | **RISK** **SCORE** | **Is there anything more that you can do to reduce the risk score in addition to what is already planned or in place?** | **RESIDUAL** **RISK SCORE** |
| **L** | **C** | **R** | **L** | **C** | **R** |
| DisabilitiesPoor / lack of trainingPoor / lack of supervisionLack of experienceToo few peopleToo many peopleNon-employeesIllness/diseaseRushingViolence/aggressionStressExpectant mothersLack of knowledge lack of/poor communicationPotential for human errorVulnerable adult groups | PEEP’s in place for students. Fire safe passenger lift and evac chairs available. CTL technical staff are evac chair trained.All laboratory users are given an induction and regular refresher training.A designated Technical Lead will have authority over the labs and will be on-site at all times when the labs are open.Students only permitted to use the labs under the supervision of experienced lab users.No lone working allowed, minimum requirement one member of technical staff per floor plus building manager to open the CTL.Social distancing removed, lab capacities back to pre-pandemic level.Currently, any visitors or contractors who enter laboratories will either be supervised at all times or will have planned to work in a controlled manner.Both will be asked to sign in to record presence on site. Deliveries are normally left with reception or building manager staff for handling.Under normal situations, first aid, fire wardens, evac chair teams, contact with emergency services, etc. will be in place to deal with emergency situations.Staff not allowed into currently unoccupied areas despite urgency to start work. Staff informed of this through university communication. Local laboratory procedures in place to reduce rushing during laboratory practice.Existing HR procedures to deal with this.University support mechanisms in place for both staff and students.Complete new and expectant mothers risk assessment.CTL Ops team meeting weekly, CTL Tech team meeting weekly. Up to date information passed on to all CTL staff.General line management and supervisory staff together with communications in place to prevent errors.Identified as per Government guidelines and restricted to home working. | 222032313232222 | 544433353333335 | 10880969596966610 | Fire safe passenger lift to be tested during weekly fire bell test ahead of building reoccupation. In the first instance students will not have access to CTL & we are unlikely to have disabled users. Check evac chairs, refuge call boxes, check powered doors, test emergency pullcords, etc.Students only permitted to use the labs under the supervision of experienced lab users. All staff who use laboratories will need to be briefed on the new covid-19 operating rules and procedures. Expectations document to be issued first flowed by specific briefing.Spot-checks will take place throughout the day to ensure that behaviour in the labs is in accordance with guidance. Users should report breaches of procedure to technical supervisor. Breaches of procedure may result in access being revoked.Access to labs by prior arrangement only.Visitors will be minimised and teams/zoom, telephones, etc. used as an alternative. Meet in the open if face to face essential. Contractors will need to work to new guidelines & will be briefed before arrival. Deliveries will be dropped off at a designated spot and designated staff appointed to handle/clean items. Staff will be asked not to have personal items sent to work.Clinically extremely vulnerable staff can return to work. Clinically vulnerable staff can come back to work in a safe role can be found and safety maintained. Staff who show symptoms will be asked to self-isolate immediately. Limited numbers may have implications for dealing with illnesses although likely to be less risk because of limited numbers. Plans must ensure that appropriate arrangements are in place (e.g. first aiders) for the occupied areas under covid occupancy rules.University to plan for phased return and agree on return of key staff/contactors. Local laboratory rules will take account of potential for rushing activities due to smaller staff numbers.Potential conflict over covid related rules and procedures. To be managed by supervisors.To note the above. Re-occupation is likely to lead to stressful situations. Generic stress assessment in place that can be used to direct staff when completing individual assessments. University Validium resource available for staff.Not on the Universities list of high risk groups unless they have a serious heart condition.Phased re-occupation in collaboration with FRCS and safety advisors office. CTL staff will be receive CTL lab guidance and CTL covid-19 risk assessment in advance of return. Other users will receive CTL lab guidance document ahead of pre-arranged visits.Government advice to be monitored and adjustments made as required. | 111221222211 | 544335333335 | 544665666635 |

 L = likelihood; C = consequence; R = overall risk rating

**Section 2: Common Workplace hazards. Is there potential for one or more of the issues below to lead to injury/ill health (tick all relevant boxes)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Fall from height |  | Poor lighting | X | Portable tools | X | Fire hazards | X | Chemicals | X | Asbestos |  |
| Falling objects |  | Poor heating or ventilation | X | Powered/moving machinery | X | Vehicles |  | Biological agents |  | Explosives | X |
| Slips, trips, falls | X | Poor space design | X | Lifting equipment |  | Radiation sources | X | Waste materials | X | Genetic modification work |  |
| Manual handling | X | Poor welfare facilities | X | Pressure vessels | X | Lasers | X | Nanotechnology | X | Magnetic devices |  |
| Display screen equipment |  | Electrical equipment | X | Noise or vibration |  | Confined spaces |  | Gases | X | Extraction systems | X |
| Temperature extremes |  | Sharps | X | Drones |  | Cryogenics | X | Legionella | X | Robotics |  |
| Home working |  | Poor signage | X | Overseas work |  | Overnight experiments | X | Unusual events |  | Community visits |  |
| Late/lone working | X | Lack of/poor selection of PPE | X | Night work |  | Long hours |  | Weather extremes |  | Diving |  |

**What controls measures are in place or need to be introduced to address the issues identified?**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Identified hazards  | **What controls are currently planned or in place to ensure that the hazard identified does not lead to injury or ill-health?** | **RISK** **SCORE** | **Is there anything more that you can do to reduce the risk score in addition to what is already planned or in place?** | **RESIDUAL** **RISK SCORE** |
| **L** | **C** | **R** | **L** | **C** | **R** |
| Slips, trips & fallsDisplay screen equipmentLate/lone workingPoor lighting, heating & ventilationPoor space designPoor welfareElectrical equipmentSharpsPoor signageLack of/poor PPEPortable tools, powered/moving machinery including scientific equipmentPressure vessels / cryogenicsFire hazardsRadiationLasersOvernight experimentsChemicals/solventsGassesChemical wasteGeneral wasteLegionellaExplosivesExtraction systemsScientific instruments | Limited staff on site so reduced risk. Campus support patrolling areas and can identify defects in underfoot conditions. FRCS maintenance and contractor support available to deal with emergencies. Labs are checked regularly by technical staff safety champion inspections.Existing arrangements and guidance in place for working at DSE.Lab opening hours will be 8am – 5pm during this period, there will be no late/lone workingFRCS staff are monitoring and managing heating, lighting and ventilation systems across the university.Areas will have been designed to allow good movement of people and good access to equipment.Staff would have cleaned kitchenette/toilet areas prior to leaving building but areas may not have been cleaned for some time. PAT testing code of practice in place. Items should have been tested and compliant before covid-19.Existing arrangements in place to deal will sharps will still be valid.Existing H&S signs will be in good order – any deficiencies will be reported to FRCS for addressingPPE requirements assessed by risk assessments and COSHH for each lab and activity. PPE available in labs at request.All equipment has been left in safe condition prior to lockdown.In occupied buildings normal routine checks will be in place and only operated by competent staff. Cryogenic pressure vessels used once a week during lockdown. Staff always visually inspect cryogenic pressure vessels prior to use.Alarm systems will have been checked as standard by FRCS. Areas will have been made safe prior to leaving the building. CTL has been visited once a week and fire hazardous areas checked.Areas and sources locked off and made safe prior to staff leaving and checked once a week during lockdown.Equipment made safe prior to lockdownNo overnight experiments have been running during lockdownAreas made safe prior to lockdown and regular checks in place to ensure safety in these areas.Gas store secured and bottled gas supplies turned off prior to lockdown.Chemical/solvent waste disposed of through Chemistry stores before lockdownGeneral waste and recycling would have been cleared prior to staff leaving. Where required contracting staff have been employed to service buildings still in use.Where required areas would have been flushed by staff prior to leaving building. Water would have been left standard for a number of weeks.Monitored by CTL chemical inventory.Maintained by FRCS. Fume cupboard extraction has continued to run during lockdown.Risk assessments & SOP’s in place | 320222222222221022222222 | 434232522444553455525533 | 126046410448881010301010104101066 | All CTL staff provided with personal locker to keep bags, coats etc. Reduced number of staff for the Summer so risk is reduced. Safety champion inspection should be completed on return to work.Strict usage rules to be introduced. No hot desking. Individuals to be allocated one space. Staff responsible for cleaning regularly used items of equipment such as keyboards and telephones (FRCS to provide cleaning materials).Nominated essential workers to undertake pre-occupation checks on these areas to ensure these aspects of the building are in working order. Provision of good ventilation is essential as part of covid controls so FRCS in conjunction with ventilation experts will need to assess prior to re-occupation. Report failures to FRCS.Areas may have to be rearranged. Areas to use agreed university guidelines for planning space for staff and students in conjunction with FRCS.FRCS will arrange for continued cleaning of these areas. Staff to assist in cleaning kitchen equipment on a regular basis. FRCS to provide additional cleaning products for staff to use.Possible that some items will be out of test. Visual inspection should be carried out before items are used and a PAT test arranged ASAP with qualified CTL PAT testers.Hand washing and other covid related signage will need to be agreed and introduced before occupation. Standard risk assessment sign recommended by Government to be posted at entrance once arrangements approved.Reoccupation plans to include assessment of PPE needs for all staff returning to work. To include requirement for travel to and from work. Only to be used as last resort when other control measures inadequate to control the risk. Stock levels to be replenished after some PPE donated for covid.Equipment left idle for extended periods should be checked prior to use. Emergency features should also be tested. Equipment should be tested by an experienced user first.FRCS will ensure that all statutory testing is completed prior to re-occupation. Handover certificate will be issued.FRCS staff to undertake checks on fire related equipment prior to re-occupation. Recorded as part of handover certificate Nominated staff to undertake pre-occupation checks around and inside building. Fire risk assessment and GEEP to be in place prior to re-occupation. Staff to reinstate weekly call point testing. Extra PPE to be provided for evac chair users.Inspection of radiation areas by RPS Steve Chappell prior to staff return. Liaison with RPO to confirm return to work.Visual inspection by CTL technician before equipment can be used.Limit overnight experiments at technical supervisor’s discretion due to potential difficulties in responding.Fume cupboard ventilation to be in proper working order before re-occupation. Visual inspection of Chemistry labs by safety champions when CTL re-opens. Risk assessments in place for chemical and solvent use in CTL, no extra covid related precautions required.Medical pipeline annual safety inspection due in July ahead of return. Leak test, emergency shut off and oxygen depletion tests performed by CTL technicians when labs open.Risk assessments in place for chemical and solvent waste disposal in CTL, updated with covid precautions in line with chemistry stores procedure.FRCS to continue to service areas. Ensure bins moved into position to be used by staff for tissues, face coverings, etc. so that travel distances are reduced.Follow standard legionella flush procedures for CTL on return.Check inventory and possible actions ahead of returnBMS indicates when labs are safe to use, must be checked prior to openingRA & SOP’s to be reviewed, their use will be by prior arrangement only | 211111111111111111111 | 433252444553455525533 | 833252444553455525533 |

L = likelihood; C = consequence; R = overall risk rating

**Section 3: Additional hazards: are there further hazards NOT IDENTIFIED ABOVE that need to be considered and what controls are in place or needed? (list below)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Identified hazards**  | **What controls are currently planned or in place to ensure that the hazard identified does not lead to injury or ill-health?** | **RISK** **SCORE** | **Is there anything more that you can do to reduce the risk score in addition to what is already planned or in place?** | **RESIDUAL** **RISK SCORE** |
| **L** | **C** | **R** | **L** | **C** | **R** |
| Covid-19 | PPE – face masks strongly recommended in all communal areas, ground floor labs & first floor labs in line with university policy on face coverings. Disposable hydrophobic masks being worn in chemistry labs. [https://www.liverpool.ac.uk/intranet/media/intranet/safety/documentsguidance/Face,coverings,during,COVID,University,policy,version,10,SEPT,2020.docx](https://www.liverpool.ac.uk/intranet/media/intranet/safety/documentsguidance/Face%2Ccoverings%2Cduring%2CCOVID%2CUniversity%2Cpolicy%2Cversion%2C10%2CSEPT%2C2020.docx) | 3 | 5 | 15 | Institutional Covid Risk assessments for various workplacesInstitutional stress risk assessmentExpectations document for use as part of pre-occupation briefingGeneral guidance on general health and safety related issuesArea to prepare, deliver and undertake:Local assessment and arrangements based on the abovePre-occupation briefings for staff and contractorsRegular monitoringSafety adviser’s Office to undertake regular monitoring of arrangements | 2 | 5 | 10 |

L = likelihood; C = consequence; R = overall risk rating

**Section 4: Emergency arrangements (List any additional controls that are required to deal with the potential emergency situation)**

|  |  |
| --- | --- |
| **Emergency situation** | **Additional control required** |
| First aid and CPR | Occupational health has agreed protocol – will need gloves and masks for CPR |
| Fire | Need masks for evac chair users. If alarms sound, staff must put evacuation above covid rules until they get to the assembly point. |
| Serious injury | NB – Emergency services may not be able to respond in good time so local arrangements to take this into account and good first aid provision to be provided. |

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| --- | --- |
| Risk assessor (signature) Stephen Chappell | Date 13/01/2022 |
| Authorised by (signature) | Date |

## **COMPLETING THE RISK ASSESSMENT FORM**

* School/Department – note down the School and/or Department where the task is being carried out
* Building – note the specific building(s) where the task is being carried out
* Task – specific clearly the task being carried out
* People would could be adversely affected – think of all the people who could be affected by what you are doing
* Hazards – tick all the relevant hazards in sections 1 and 2. If ticked you will need to log what controls are already in place to protect people from the hazard and what extra controls are required (if any) in the relevant control boxes. As part of the control measures you will need to make a decision of the level of risk based on the tables below. NB – it is likely that other hazards may exist that are not captured in sections 1 and 2. Section 3 should be used to capture any additional hazards and controls not listed in Sections 1 and 2.
* Emergency procedures – list the basic procedures that need to be taken if a critical incident occurs
* Signature – the people completing and approving the assessment must sign the relevant boxes at the end of the document.

The risk score can be calculated by using this formula: *Likelihood x Consequence = Risk Score* or, (L x C) this is then recalculated once mitigating actions are considered.

|  |  |
| --- | --- |
| **Likelihood** | **Consequence** |
| **1** | **Rare** | **1** | **Insignificant** |
| **2** | **Unlikely**  | **2** | **Minor**  |
| **3** | **Possible** | **3** | **Moderate**  |
| **4** | **Likely**  | **4** | **Major**  |
| **5** | **Almost Certain** | **5** | **Catastrophic**  |



* Additional control required - list any additional control required that will reduce the risk rating score. Ensure responsibilities for tasks and timescales are added
* Residual risk score – re-calculate the risk score after the introduction of the additional controls. Compare residual risk score with table below. Take further action if necessary.