**General Risk Assessment**

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| **Management Unit** | School of Physics & Astronomy | **Location (Site / Building / Room)** | PPE Group Facilities and general area  |
| **Assessment Date** | 13/07/2021 | **Review Date** | 13/08/2021 |
| **Assessor’s Name** | Lab Guardian (Fred Doherty) | **Job Title** | Technical Research Facilities Manager |
| **Description of Task** | Working in PPE Group Facilities and general area under COVID19 social interaction restrictions  |

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| Description of the hazard (or hazardous event) | Who might be harmed? | How might people be harmed? | What risk controls are currently in place? | Current risk rating\* | Identify any additional controls that may be needed | Timescale for additional controls and responsible person | Residual risk rating\* |
| **L** | **C** | **R** | **L** | **C** | **R** |
| Covid-19 contracted by personnel in PPE Facilities (Offices, Labs & Cleanrooms) | * University Staff
* Users
* Contractors
 | Exposure to COVID-19 | * If you or anybody in your family or somebody that you spend significant time with gets ill from Covid-19 or has Covid-19 symptoms we should log this with the Group Secretary (Jill Borland).
* The person should get tested and the test result should be conveyed to the Group Secretary.
* Lateral flow tests are now readily available from government & university outlets and can be used for individual testing during work periods in KB for monitoring possible covid infection. GU recommendations are to take two lateral flow tests per week and recommended for PPE staff.
* As a high percentage of people have now received one or both covid vaccines this further diminishes the risk from infection or passing on covid in conjunction with the risk controls outlined here.
* Kelvin Building risk assessment will cover procedure for action for people and labs.
* Group Lab Rooms Booking webpage (<http://www.ppe.gla.ac.uk/ppe-labs/>) to track who has been in which lab and office for which day for certain labs. Only labs GLADD-1 and 341 are booked.
* The group will trace the people who have worked in the same lab or office over the previous week, and they will be notified. These people should follow the government guidelines.
* The labs will NOT be cleaned with Ozone and will be left fallow as per the university instructions.
* Offices will be cleaned as per university procedures before return to that office is allowed.
 | 1 | 3 | 3 |  |  |  |  |  |
| Covid-19 contamination from other members of staff in the PPE labs and offices. | * University Staff
* Users
* Contractors
 | Exposure to COVID-19 directly from other people | * University Online user induction for all persons that require to be using the PPE facilities <https://moodle.gla.ac.uk/enrol/index.php?id=9447>
* Access to the labs and offices is only when required and kept to a minimum. Working from home is considered the norm.
* The access to the labs is booked via the PPE webpage ([Glasgow Experimental Particle Physics Internal](https://www.ppe.gla.ac.uk/covid/index.html)) for GLADD-1 and 341. Each lab is booked in three blocks per day: morning, afternoon and evening.
* The access to the shared offices is booked via the PPE webpage ([Glasgow Experimental Particle Physics Internal](https://www.ppe.gla.ac.uk/covid/index.html)), these are identified on the webpage. Maximum occupancy is given on the webpage.
* Strict room capacity limit in effect. Signage in place. Before entering any room, check the signage on the door for the maximum occupation and, if the room already has the maximum number of persons inside, do not enter.
* Higher occupancy will take place as the national Covid-19 risk level is lowered.
* Always maintain a minimum of 1 metre person to person separation.
* People limited to using their own office or the common room for breaks to limit contact with others except for the multi-use offices.
* Wear provided facemasks throughout the building, they can be removed only in the single use offices, but not the multi-use office even if you are the only user.
* Facemasks to be changed every 4 hours or if damaged.
* Office windows and door must be kept open to allow natural fresh air ventilation.
* Lab windows and door to be kept open or mechanical forced ventilation must be used for the labs.
 | 1 | 3 | 3 |  |  |  |  |  |
| Covid19 contamination when entering and leaving the PPE labs. | * University Staff
* Users
* Contractors
 | Exposure to COVID-19 from other people and touched surfaces | * Method document to describe best practice
* Hands are to be washed with sanitiser at regular intervals, notably on entry to the building and before and after opening room doors.
* When more than one person uses a lab at a given time then only one person can use the change room or enter/leave a non-clean room at a given time. The ingress/egress protocol in place for cleanrooms.
* Nitrile gloves must always be worn in the labs.
* Wear facemasks throughout the building.
* Facemasks to be changed every 4 hours or if damaged.
* Individual user cleanroom coats will be allocated with individual lockers for storage. These will be collected and returned by responsible persons for cleaning on a weekly basis. (See Method document)
 | 1 | 3 | 3 |  |  |  |  |  |
| Covid19 contamination when using equipment and/or facilities. | * PPE Staff
* Users
 | Exposure to COVID-19 from contaminated surfaces | * University Online user induction for all persons that require to be using the PPE facilities and Method document.
* Hands are to be washed with sanitiser in the cleanroom changing room or before entering the other labs.
* Working areas to be tidy to easy cleaning procedure.
* Gloves to be used in the labs
* Goggles to be used to prevent transfer to eyes when using microscopes.
* Facemask to be used to prevent spital landing on surfaces in the first place.
* Facemasks to be changed every 4 hours or if damaged.
* Labs divided into zones to maintain safe working distance.
* Minimize movement in the labs in general and to maintain separation when movement is required users coordinate their movements.
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| Covid19 contamination when using microscopes | * PPE Staff
* Users
 | Exposure to COVID-19 | * Microscopes with cameras attached are to be preferably used.
* If eyepiece optics are required, they must be wiped with IPA wipes before and after use. The rubber boot on the eyepiece should always be folded back.
* Safety glasses are to be worn during use of eyepiece optics.
* Gloves to be used in all labs.
* Wear provided facemask to reduce spital transfer.
* Facemasks to be changed every 4 hours or if damaged.
 | 1 | 3 | 3 |  |  |  |  |  |
| PPE Cleanroom equipment/ machine usage | * PPE Staff
* Users
 | Exposure to COVID-19 | * To further reduce risk of infection and allow ease of tracing, specific machines will be limited to limited users (see method document) and only sole users during a single booking period.
 | 1 | 3 | 3 |  |  |  |  |  |
| Small tools  | * PPE Staff
* Users
 | Exposure to COVID-19 | * Sharing of small tools is strongly disfavoured and members of staff will have issued their own small sets of tools. These should be cleaned on a regular basis.
* Shared tools must be cleaned before and after use.
 | 1 | 3 | 3 |  |  |  |  |  |
| Soldering irons | * PPE staff
 | Exposure to COVID-19 | * Main soldering station is in room 345.
* Room 345 is a multi-user lab, additional users can access during the day to perform soldering, but one of the users of the room must leave during this period to be consistent with occupancy limits.
* When a user wants to solder, they notify room 345 occupant and arrange for them to leave the lab at a mutually convenient time.
* 345 lab user goes to office.
* Person wanting to do soldering goes to 345 and does soldering (waring mask etc), cleans area and leaves. Tells 345 lab user that they can go back in
* Described in the method document.
* Care must be taken when cleaning near the soldering irons due to high temperature and flammability of cleaning fluid. The soldering iron should be cooled before post-use cleaning.
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| 3D printer | * PPE staff
 | Exposure to COVID-19 | * 3D printer is in room 345
* Room 345 is a multi-user lab, additional users can access during the day to perform 3D printing, but one of the users of the room must leave during this period consistent with occupancy limits.
* See method document for process.
 | 1 | 3 | 3 |  |  |  |  |  |
| PPE Single User Offices | * PPE Staff
* Users
 | Exposure to COVID 19 | * Only one person at a time to use single user PPE office.
* Offices limited to a unique designated user.
* For offices that are presently multi-user, one person will be allocated to the office and the other users will be allocated to other offices as a single user.
* All common interfaces and keyboards to be wiped with IPA wipes before and after use by the user. Laptops should be turned off before cleaning.
* Cleaning of door handle before entering
* Washing of hands with sanitiser after entering office
 | 1 | 3 | 3 |  |  |  |  |  |
| PPE multi-user offices (233,326A,328A) | * PPE Staff
* Users
 | Exposure to COVID-19 | * Offices limited to designated users.
* Rooms Booking webpage (<http://www.ppe.gla.ac.uk/ppe-labs/> ) to track who has been in which office for which day.
* Ideally users use unique desk and PC otherwise all common interfaces and keyboards to be wiped with IPA wipes before and after use by the user. Laptops should be turned off before cleaning.
* Wash hands with sanitiser before and after entering office
* Wear facemask while in the office, even if nobody else in the office.
* Facemasks to be changed every 4 hours or if damaged.
* Office windows and door must be kept open to allow natural fresh air ventilation.
* Minimize movement in general and to maintain separation when movement is required, users coordinate their movements.
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| Social distancing for welfare facilities | * PPE Staff
 | Exposure to COVID-19 | * Food and drink can be consumed in the office or outside the building as well as the common room.
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| Lone working due to limited lab occupancy | * PPE staff
 | General H&S risks due to limited number of people around. | * Buddy system with known lab users
* Contact made between buddies the day before lab attendance.
* Use of personal phones and WhatsApp to check with each other each 30 mins on the hour and half-hour.
* Out of office hours or no other lab users then need an off-site buddy and inform security.
 | 1 | 3 | 3 |  |  |  |  |  |
| Ventilation | * PPE staff
* Users
 | Exposure to COVID-19 | * Room windows and doors are kept open (open windows for minimum 10m for every 2h period) where possible, no use of office type AC which recirculates air around the room. Make sure touched surfaces of windows are cleaned before and after use.
* Cleanroom GLADD-1: Fresh air exchange at 33 times per hour.
* 345: Open windows and doors as often as possible (minimum 10m/2h period).
* Cleanroom GLADD-2 (341a): Two new Bassaire units installed during pandemic either side of semi clean room draws air from window area. Leave on 24/7. Mechanical air extraction to the roof at the far wall from the windows increases air exchange.
* 341: Open windows and doors as often as possible (minimum 10m/2h period). Mechanical air extraction to the roof at the far wall from the windows increases air exchange but draws air predominantly from the corridor rather than outside.
* Offices: Open windows and doors as often as possible (minimum 10m/2h period) for throughput of fresh air.
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| Tape and tools stored in 339 | * PPE staff
 | Exposure to COVID-19 from multi-use of room 346 | * Minimise the use of shared tooling. Toolkits purchased for individual selected users.
* Moved tool chest and often used tools from office 339 to lab 341. Placed tool chest in front of desk in central isle between X-ray box and TCT system.
* Let Lab Guardian (Fred Doherty) know if we go into office 339 for any tools that have not been moved.
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| Read and accepted by | Signature | Date |
|  |  |  |

\***L**ikelihood x **C**onsequence = **R**isk

**Risk Rating Calculator**

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| --- | --- |
| **Likelihood that hazardous event will occur** | **Consequence of hazardous event** |
| **1** | **Very unlikely (e.g. 1 in 1,000,000, Not accurate, for guidance only)** | **1** | **Insignificant (no injury)** |
| **2** | **Unlikely (e.g. 1 in 100,000, Not accurate, for guidance only)** | **2** | **Minor (minor injury requiring first aid only)** |
| **3** | **Fairly likely (e.g. 1 in 10,000, Not accurate, for guidance only)** | **3** | **Moderate (Up to three days absence)** |
| **4** | **Likely (e.g. 1 in 1,000, Not accurate, for guidance only )** | **4** | **Major (More than seven days absence)** |
| **5** | **Very likely (e.g. 1 in 100, Not accurate, for guidance only )** | **5** | **Catastrophic (Permanent injury or death)** |

**Action Level Table**

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| **Risk Rating** | **Risk Level** | **Actions to be taken** |
| **20 – 25**  | **Very High Risk** | **STOP!** Stop the activity and take immediate action to reduce the risk, a detailed plan should be developed and implemented before work commences or continues. Senior management should monitor the plan. |
| **15 – 16** | **High Risk** | **Urgent Action!** Take immediate action and stop the activity if necessary, maintain existing controls rigorously. The continued effectiveness of control measures should be monitored periodically. |
| **8 – 12**  | **Moderate Risk** | **Action** Moderate risks may be tolerated for short periods only while further control measures to reduce the risk are being planned and implemented. Improvements should be made within the specified timescale. |
| **3 – 6**  | **Low Risk** | **Monitor** Look to improve at the next review or if there is a significant change. Monitor the situation periodically to determine if new control measures are required. |
| **1 – 2**  | **Very Low Risk** | **No Action** No further action is usually required, but ensure that existing controls are maintained and reviewed regularly. |

**Some example hazards that may apply to the activity (not exhaustive)**

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| **Working at height** | **Noise** | **Lighting (including strobe lighting)** | **Fire and explosion** |
| **Falling objects** | **Vibration** | **Compressed air** | **Hazardous chemicals** |
| **Slippery, uneven or worn floors** | **Hand tools** | **Magnetic fields** | **Biological risks / disease** |
| **Obstructions and projections** | **Repetitive hand / arm movement** | **Pressure systems** | **Animals** |
| **Confined spaces** | **Machine operation** | **Needles and sharps** | **Compressed Air** |
| **Mechanical Lifting** | **Manual Handling** | **Lasers** | **Hydraulic systems** |
| **Poor housekeeping** | **Vehicle movements** | **Ionising and non-ionising radiation** | **Other (please specify on assessment)** |