



Risk Assessment for Returning to Work during the Covid-19 Lockdown Easing Period

Department / Group/Team	X-ray Diffraction RTP	Date of assessment	21 st May 2020
Building	Materials & Analytical Sciences	Reduced Occupancy Level (Maximum)	<p>Managers should consult their Estates Building Manager regarding ‘reduced’ occupancy figures (where applicable) in order to determine how many people can safely use each space. This should be used as an initial guide alongside knowledge of the space itself. Consultation may also be required with other managers who share the space or with Health and Safety Services.</p> <p><i>The X-ray RTP will follow the local guidance for the MAS building issued by Physics/Chemistry and Estates for all shared spaces.</i></p> <p><i>For the laboratories:</i></p> <ul style="list-style-type: none"> • MAS 3.10 – High-resolution XRD – Max 1 person. • MAS 3.11 – Single-crystal / XRF – Max 1 person. • MAS 3.12 – Prep lab – Max 2 people, working at opposite ends of the laboratory. • MAS 3.13 – Powder X-ray Room / SAXS – Max 2 people <p><i>Maximum room occupancies will be clearly displayed on all the laboratory entrances.</i></p>
Space(s) in use	3 rd floor MAS including laboratories 3.09 – 3.13 and associated spaces (offices, kitchen area, toilets, stairwells)		



'Critical Activities' to be carried out

Critical Activity - Any activity which has critical business consequences for the University if were to be delayed any further after Government 'lockdown' rules start to be relaxed. In terms of Research departments that would include:

- 1. Externally funded laboratory research activity (and the lab support services it relies on), including UKRI or similarly funded work, RTP activities, or work funded by industrial partners or similar sponsors.**
- 2. Research required to prepare for (or bid for) future externally funded laboratory research activity (and the lab support services it relies on).**
- 3. Laboratory based PhD student projects.**

Anything other than work falling into the categories above, and which is therefore not a critical activity, will be expected to take place remotely or continue to be paused (e.g. all data analysis and other desk based carried out by work by researchers to be undertaken remotely).

RTP staff will ensure most commonly used instruments are fully operational. Once this is established, RTP staff would run samples on these instruments. Samples from Chemistry, Physics and external clients would be run with the data returned to the client for processing wherever possible. As demand increases, a very limited number of "superusers" will be able to run the equipment on behalf of their respective groups, carefully scheduled to avoid space conflicts.

An upgrade to one of the instruments is also planned (contractor has provided suitable risk assessments which take COVID-19 requirements into consideration. It is required to take place in order to spend the grant within this financial year. Other engineers may be required for equipment maintenance and will follow a similar procedure, if unable to work remotely.

Line Manager carrying out the assessment

David Walker

Further information on Risk Assessment, Covid 19 and general health and safety are available at:

<https://warwick.ac.uk/services/healthsafetywellbeing/managingrisks/>

<https://warwick.ac.uk/services/healthsafetywellbeing/a-z/healthandsafetyguidanceoncovid19>

There is also a Risk Assessment Moodle training module available via Warwick's MyMoodle.



Staff supporting
assessment process

If you require support or advice on completing this form please contact your Health and Safety Officer or Health and Safety Adviser:

<https://warwick.ac.uk/services/healthsafetywellbeing/contacts/>

Richard Walton (X-ray RTP director), Dave Hammond, John Horsler (HSO) & Steven Huband

You must consult with your staff in carrying out this Risk Assessment, and must seek support from any recognised Trades' Union Safety Representatives in particular. Carry out a MS Teams (or similar on-line) meeting with your team before starting this assessment and ask for their input and support. Encourage collaboration and cooperation and seek to provide re-assurance that control measures agreed with the team will be implemented and maintained. You will also need their help to ensure that they support each other in maintaining the agreed control measures.

Re-assure staff that in preparing this template the H&S Services Team have taken Government and TUC guidance into account. Particular assurance might be required for those or are vulnerable, living with vulnerable people, pregnant, in the BAME community, are disabled or who might have child care (or other care provision) challenges at this point in time.

Additional Information

Staff should not be coming into work unless the work is deemed a 'critical activity' by the University.

For 'critical activities', managers need to examine the spaces that they require people to work in and determine how they can manage the risks associated with Covid-19 in that space and connected with the work involved. Not all tasks need to be completed on campus and staff must only come to campus if they cannot do the work from home, and only then to complete the essential tasks before going home to continue working from there for the rest of the day/week. Managers should be minimising the amount of time they or their staff need to be on campus.

Limiting Durations of Work

Time spent with others, as well as distancing, is an important control measure. People might only need to come to campus to complete their 'critical activity' tasks and then could go home to continue working from there for the rest of the day/week. Wherever possible managers/supervisors should be minimising the amount of time they or their staff need to be on site.

Meetings

Meetings should only be held if absolutely necessary, and should be held as on-line meetings, even if some or all of the participants are on campus. Where this is not possible meetings must be held where 2 metre distancing can be maintained and preferably in a well ventilated space or outdoors.

Other Risk Assessments

Risk assessments already in place (for work activities, chemicals, biological agents, work equipment, etc.) are still applicable and must complement the risks and risk control measures covered in this specific risk assessments. These risks need to be assessed jointly and a holistic approach to ensuring the health and safety of individuals adopted.

Further information

Refer also to the Standard Operating Procedure for staff returning to work to carry out 'Critical Activities' during Covid-19 lockdown easing period, which is included at the end of this assessment.

Hierarchy of Control Measures to be used (these are listed in order of priority, but a combination of controls may be required)		Control Measure (Please answer the questions in this column)
Eliminate	<p>Any staff reporting that they are unwell with symptoms of Coronavirus (Covid-19) must be told not travel to or attend the University. Their sickness absence should be recorded within the University HR System SuccessFactors. Testing is available for any members of staff deemed to be required to come to work by the University for 'critical activities'.</p> <p>Staff with symptoms must be told to self-isolate, as should staff with members of their household who are showing symptoms, until testing confirms that it is not Covid-19 (see University Covid-19 testing guidance) or the relevant time period has elapsed.</p> <p>If a member of staff does fall ill, then the space in which they were working should be left empty and well ventilated for at least 72 hours and extra cleaning be arranged with Cleaning Services by the manager.</p> <p>Staff who are in the 'extremely vulnerable' group (have received a specific letter from the NHS) are shielded and must not come to work. Staff in the 'vulnerable' group need to follow the strictest levels of '2 metre distancing', and they should continue working from home or to stay at home until further notice.</p> <p>Meetings on campus</p> <p>Meetings should continue to be held as on-line meetings, even if some or all of the participants are on campus. Where this is not possible meetings must be held where 2 metre distancing can be maintained and preferably in a well ventilated space or outdoors. DO NOT invite visitors to come to campus, other than contractors</p>	<p>Does your workforce need to come onto campus to carry out this critical work or can they continue to work from home?</p> <p><i>Yes, equipment maintenance and/or running of research samples on behalf of users and external clients cannot be done remotely. The Panalytical Engineer (from 15th June) cannot work remotely as the upgrade requires hands on adjustment of the instrument.</i></p> <p>Have staff been fully informed of the needs for self-isolation should they have any symptoms whatsoever?</p> <p>Yes</p> <p>Have staff who are 'extremely vulnerable' or 'vulnerable', or live with such people been fully considered?</p> <p><i>Yes. Each member of RTP staff in our team has had a 1-1 conversation (in conjunction with Dan Lester, the Polymer RTP manager as appropriate)) to ensure that they are comfortable with returning and are aware of the guidance. All other staff will be asked to submit a web form acknowledging they are aware of the guidance prior to returning to the lab.</i></p> <p>Can meetings be held online, eliminating the need for people to be on campus or for them to congregate?</p> <p>Yes</p>

Hierarchy of Control Measures to be used (these are listed in order of priority, but a combination of controls may be required)		Control Measure (Please answer the questions in this column)
	who need to attend to equipment or systems required for a critical activity.	
Reduce	<p>Where ‘elimination’ cannot be applied consider whether you can ‘reduce’ the likelihood of persons coming into contact with one another:</p> <p>Consideration should be given to rotas or shifts in order to keep the number on campus at any one time to a minimum. Night shifts should be avoided, but early and late shifts, or weekend working might be appropriate.</p> <p>Booking systems for deliveries or collections, and systems for the use of receptions, should be set up in such a way as to minimise person-to-person contact.</p> <p>People must be encouraged to leave the University as soon as they have finished the activity which cannot be conducted from home.</p> <p>Wherever possible, all data should be uploaded to a shared drive or system which allows the analysis or work to be undertaken at home.</p> <p>Writing-up of experiments, results and reports must be conducted at home.</p>	<p>How can you reduce the number of people required on campus, whether to carry out tasks or to attend meetings?</p> <p><i>Only three staff will be granted access to the building and it is considered unlikely that all would be on site at the same time. The X-ray RTP will always operate with the minimum attendance required. Lone working will follow the university guidelines:</i></p> <p><i>(https://warwick.ac.uk/services/healthsafetywellbeing/a-z/healthandsafetyguidanceoncovid19/loneworking)</i></p> <p><i>Staff will not be present if only analysing data, only instruments that are required will be switched on and maintained.</i></p> <p>How will you stagger working times, so that people do not need to be in the same space at the same time?</p> <p><i>The RTP will dedicate staff members to individual instruments and assign office spaces to ensure that people do not need to be in the same space at the same time. Staggered working times are therefore only considered to be an issue at start and end of working days.</i></p> <p>How will you reduce the hours that people need to be on site?</p> <p><i>RTP staff will only be in the office to run experiments and maintain equipment only. All analysis can be done remotely. Where possible, a user will perform multiple experiments on a single day to reduce the number of visits to campus that are required.</i></p>

Hierarchy of Control Measures to be used (these are listed in order of priority, but a combination of controls may be required)		Control Measure (Please answer the questions in this column)
		<p>How does your booking process control the number of people in your facility/space?</p> <p><i>Only RTP staff will be able to access the building to run samples during Phase 1. In Phase 2 users will be able to book instrument time online for RTP staff to run. Samples drop off times will be allocated to minimise the possibility of staff contact. As demand increases, a very limited number of “superusers” will be able to run the equipment on behalf of their respective groups, scheduled to avoid space conflicts.</i></p> <p>If the spaces you manage are big enough, can you minimise the frequency and time that people could potentially come into contact with each other?</p> <p><i>Only RTP staff and trusted superusers (in Phase 2) will be allowed access to the laboratory spaces. Numbers will be strictly limited, and our booking system used to ensure overlaps are avoided. Staff/Users will load samples and then be expected to work remotely, to setup and run the measurements, wherever possible.</i></p> <p>What floor markings can be provided to ensure that people maintain 2m distancing? Contact Estates via the Helpdesk if you wish to mark the floor in your area.</p> <p><i>Floor markings should not be required in our laboratory spaces, due to strict occupancy numbers and other control measures.</i></p>
Isolate	Where work activities have to be carried out with others, and persons have to work within relative close proximity to one another for intermittent work activities:	<p>Do you need to introduce screens or barriers to separate people?</p> <p><i>No, it is possible to maintain social distancing using other control measures including staff limits and maximum occupancies.</i></p>

<p>Hierarchy of Control Measures to be used (these are listed in order of priority, but a combination of controls may be required)</p>	<p>Control Measure (Please answer the questions in this column)</p>
<p>Screens (such as Perspex screens) and barriers (to keep people back from reception desks for example) must be deployed where there is regular contact with people which cannot be eliminated.</p> <p>Try to keep staff groups small and consistent as far as possible, forming fixed teams and partnering arrangements for people whilst at work. The number of different contacts people have with others at work should be kept as low as is possible.</p> <p>Consider access for cleaners, IT staff, Estates staff, etc. and how such activities can be carried out safely.</p> <p>Ventilation and fresh air is important – desk top humidifiers must not be used in the workplace.</p> <p>Justify why you cannot conduct a meeting online, AND is there a space where you can meet with a small number of staff that is in the open or where there is good ventilation, and where 2 metres distancing can take place? Use Teams/Zoom/Skype, etc. for meetings.</p>	<p>How will you reduce the team size to be as small as possible, or identify fixed teams/partnering?</p> <p><i>RTP staff will only be in to carry out critical activity, e.g maintaining equipment and running samples. A buddy system will be employed in-line with lone working procedures:</i></p> <p><i>https://warwick.ac.uk/services/healthsafetywellbeing/a-z/healthandsafetyguidanceoncovid19/loneworking</i></p> <p>How will you ensure people conduct their work away from each other?</p> <p><i>We will work in separate laboratories, wherever practical and make extensive use of remote access tools, booking systems and other control measures to ensure social distancing.</i></p> <p>Can you open windows (including in vehicles) or doors to increase ventilation to the space and permit fresh air circulation? [Note: this is not applicable to containment labs or spaces where there is local exhaust ventilation in place as this can affect extraction efficiency]</p> <p><i>The laboratories are serviced by the air handling units and cannot be opened to fresh air circulation. In MAS 3.09, the windows can be opened and are usually open in summer regardless due to temperature issues.</i></p> <p>Is there good general ventilation provided by air handling or air conditioning units where windows cannot be opened?</p> <p><i>Yes.</i></p>

Hierarchy of Control Measures to be used (these are listed in order of priority, but a combination of controls may be required)		Control Measure (Please answer the questions in this column)
Control	<p>Where 'critical activity' work within 2 metres just cannot be avoided:</p> <ul style="list-style-type: none"> • Introduce a local system where you will know who is on site and what work they are doing and increase the level of supervision to monitor and manage compliance with the working arrangements. • People should work from a desk or workstation assigned for their exclusive use, and avoid desk sharing or hot-desking as far as possible: where desks, workstations or equipment have to be shared, these should be cleaned after each use. • Workers should conduct their activities by working side by side, or facing away from each other, rather than face to face wherever possible • Ensure that there is a means to regularly clean common touchpoints, doors, buttons, handles, tools, equipment etc. in spaces where you do not have routine cleaning by Estates Cleaning staff. • Ensure that there is hand washing facilities in the spaces (with soap and water) to permit people to wash their hands before and after using any equipment? • Introduce hand sanitiser (e.g. where limited access to soap and water) • Keep work to short durations e.g. less than 15 minutes. • Reduce the frequency that the lifts are used to reduce congestion and contact at all times including where the lifts are used for the movement of goods from one floor to another. 	<p>Identify any essential tasks that will require people to potentially work within 2 metres of each other.</p> <p><i>In standard operating we do not foresee tasks which would involve any breach of social distancing.</i></p> <p>Can the workplace be rearranged to allow people to work side-by-side or back-to-back, rather than facing each other? How can you rearrange tasks to enable them to be carried out by one person, or by maintaining the 2 metres distancing?</p> <p><i>The laboratories are arranged in a layout which allows social distancing with the restrictions on occupancies that have been put in place.</i></p> <p>How will you ensure the areas are being cleaned regularly and at the end of the day/shift?</p> <p><i>The RTP staff/users will be responsible for the laboratory areas that they are using during the day/shift. A regular cleaning regime in the laboratories will be instigated, using isopropanol in either a spray, with tissue, or in dedicated wipes. We will impose a clear rule that keyboards, mice, door handles, and microscopes (and any other applicable surfaces that have been touched) be wiped down <u>before and after use</u>. It is understood that supplies of sanitiser spray will be available from the Haddleton group in Chemistry.</i></p> <p>Are there enough hand washing facilities for those involved in the 'critical activities'?</p> <p><i>Yes, there are wash basins in MAS 3.04, 3.05, 3.08 and 3.12.</i></p>

Hierarchy of Control Measures to be used (these are listed in order of priority, but a combination of controls may be required)	Control Measure (Please answer the questions in this column)
<ul style="list-style-type: none"> • Cleaning equipment/supplies for IT equipment (including photo-copiers, etc.) might be required, and/or added to the cleaning regime for the area. • Consider access for cleaners, IT staff, Estates staff, etc. and how such activities can be carried out safely. 	<p>Do you need to introduce hand sanitiser? <i>Yes. Additional hand sanitiser is likely to be required at the entrance to the building/open plan office area.</i></p> <p>Will you need to use the lift for any activities? <i>We may require the goods lift to move packages, gas bottles from Physics / Chemistry stores into the 3rd floor MAS. Nitrogen dewers from the filling point on the ground floor of MAS. The passenger lift would not ordinarily be required.</i></p> <p>Will cleaners, IT Staff or Estates need to access your area whilst your staff are working? <i>For cleaners and Estates staff, we will follow the guidance from Estates. The X-ray RTP staff will work around the cleaning schedule to ensure a safe working environment for all parties. IT services do not normally require access to our facility.</i></p>
<p>First Aid and Fire Safety</p> <p>Have you considered any high risk activities which need particular First Aid or Fire Safety arrangements. If you are concerned about first aid cover or fire safety contact Health and the Safety Helpdesk.</p> <p>Security will be able to provide emergency First Aid support during this period, but managers should endeavour to provide first aiders as far as is possible at present.</p> <p>Encourage all members of staff to act as temporary Fire Wardens during this period. They can complete the Fire Warden training module available on Moodle. They need to know how to flag any</p>	<p>Are there any high-risk activities which need particular First Aid or Fire Safety arrangements? <i>There are no high-risk activities which need special emergency arrangements.</i></p> <p>Do staff know how to access first aid kits or how to contact Security for emergency first aid. <i>Yes, first aid kit is located in the dirty corridor besides MAS 3.13. Staff have long employment history and are aware of Security contact details.</i></p>

Hierarchy of Control Measures to be used (these are listed in order of priority, but a combination of controls may be required)		Control Measure (Please answer the questions in this column)
	concerns relating to fire safety to the Health and Safety Helpdesk. Normal fire escape routes take precedence over one way routes in an emergency situation.	<p>Do staff know how to access other risk assessments relevant to their area or activity.</p> <p><i>Yes. These are accessible on the RTP web pages</i></p>
Behaviours	<p>The measures necessary to minimise the risk of spread of infection rely on everyone taking responsibility for their own actions and behaviours. As a manager you will need to encourage an open and collaborative approach, where any issues can be openly discussed and addressed.</p> <p>Line managers must hold a 'returning to work briefing' with any staff returning to campus at the earliest opportunity, sharing this completed document with them in writing and allowing any questions.</p> <p>Line managers must carry out regular team meetings to review this risk assessment and arrangements with staff. Line Managers should also refer to and follow any relevant HR or OD guidance.</p>	<p>How will you monitor compliance with the control measures set out in this risk assessment?</p> <p><i>The situation will be reviewed on a weekly basis via a weekly Teams meeting to discuss any issues that have arisen.</i></p> <p>How often will you brief and update your team on any changes to this risk assessment or associated control measures?</p> <p><i>Staff will be updated as quickly as practicably possible (via Teams and/or email) to any changes to procedure or the risk assessment. We also receive regular guidance from Ian Hancox and Physics/Chemistry.</i></p> <p>How will you encourage staff to flag any concerns they might have, problems or deviations from the arrangements?</p> <p><i>Once back, my staff (David Hammond, Steven Huband) will be encouraged to provide feedback on all aspects of the arrangements and we will feed this back to the academic director (Richard Walton), local HSO (John Horsler), Ian Hancox and Physics/Chemistry/Estates (as appropriate) with any necessary changes being made to the</i></p>

Hierarchy of Control Measures to be used (these are listed in order of priority, but a combination of controls may be required)		Control Measure (Please answer the questions in this column)
		<i>working procedures. Staff can also report concerns directly to the H&S office.</i>
One way Routes and Passing Places	Line Managers must find out any local temporary instructions on any access/egress arrangements, one way routes and passing places. These must be shared with your staff. Normal fire escape routes take precedence over one-way routes in an emergency situation.	<p>Are you aware of all of the local temporary instructions on any access/egress arrangements, one-way routes and passing places. And can you easily relay these to your staff?</p> <p><i>We understand that guidance will be provided by Physics/Chemistry/Estates for shared areas and this will be circulated to all members of the X-ray RTP team.</i></p>
Communal areas	<p>It is important that people continue to take breaks from their work activity. Communal areas which are used for breaks and meals must be arranged to ensure that people maintain 2 metre separation at all times.</p> <p>If people need to remain on campus, they should be encouraged to take their breaks outside in the fresh air, while maintaining 2 metre separation.</p> <p>People should bring their own food, which ideally does not require the use of a microwave, as there will potentially be limited access to kitchen or catering facilities.</p> <p>Kitchenettes, etc. must have floor markings to ensure that they do not become overcrowded and allow queuing, back-to-back working and one-way systems.</p> <p>Toilets, changing rooms, showers, etc. must be managed to ensure that they do not become crowded. ALL personal items</p>	<p>What arrangements have been made to allow safe breaks?</p> <p><i>Each member of RTP staff will have an assigned "office-desk" following discussions with Physics/Chemistry and Estates.</i></p> <p><i>Currently, the RTP staff occupy a "pod" at the kitchen end of the MAS 3.09 open plan office. The other occupants are from Physics (Beanland, Duffy, Hase, Lloyd-Hughes and Thomas groups) and Chemistry (Gibson group). Most of these other occupants can either work remotely or, in line with Physics and Chemistry Department policies, only in the building to undertake experimental work in the laboratories. Therefore, we do not expect any significant occupancy of the open plan office beyond the RTP staff, especially in Phase 1. However, all 3 staff cannot occupy the pod at the same time, as it would not respect social distancing guidelines, and neither can they hot desk.</i></p> <p><i>Therefore, our proposal, which requires consultation with Physics/Chemistry is for 1 member of the X-ray RTP staff in our pod in 3.09 at any one time and another potentially using Pam Thomas's office (MAS 3.02), which she has kindly offered. We will rota breaks</i></p>

Hierarchy of Control Measures to be used (these are listed in order of priority, but a combination of controls may be required)	Control Measure (Please answer the questions in this column)
	<p><i>to ensure no more than one person will be using the 'pod' at any time.</i></p>
<p>Personal Protective Equipment (PPE)</p> <p>Workplaces should NOT encourage the precautionary use of extra PPE to protect against Covid-19 (except when responding to suspected or identified cases of Covid-19).</p> <p>Where PPE is deemed necessary as a control measure to ensure the safety of the individual for the work activity that they are undertaking, e.g. work involving hazardous substances, it must continue to be worn.</p> <p>Workers MAY choose to use a home-made face covering in the workplace, but this should NOT be a substitute for 2 metre distancing and more effective hygiene measures (regular handwashing, use of sanitisers, and catching coughs and sneezes in a tissue).</p> <p>Workers who choose to use a face covering should be supported in its effective use.</p>	<p>Refer to your activity-based risk assessment for any PPE requirements.</p> <p><i>The X-ray RTP safety rules require access to disposable nitrile gloves and safety glasses. Safety glasses will be sanitised prior to use and subsequently restricted to individual usage. Lab coats are currently shared within the X-ray facility, but for Covid-19 safety, this practice will have to change to individual lab coats. These lab coats will need to be regularly replaced and laundered. One or both of Physics/Chemistry will need to have the facilities for this available.</i></p> <p>If any of your team choose to use a face covering, what instruction will you provide to enable them to use it to best effect?</p> <p><i>To follow the national guidance and use appropriately. Wash cloth masks regularly</i></p>
<p>Guidance to staff</p> <p>Have you issued the Covid-19 guidance to all of those that are returning to work to carry out 'critical activities' (see appendix A)?</p> <p>Have you arranged briefing sessions on the risk assessment and SOP with staff?</p> <p>Have you arranged 1-2-1 meetings with staff who are vulnerable, living with vulnerable people, pregnant, in the BAME community,</p>	<p>Yes</p> <p>Yes</p>



Tick here if the level of risk is acceptable to permit the work activity to take place (once you have put the control measures above in place)	YES	Line Manager Signature	
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List of people with whom this assessment has been shared: <i>David Walker, Richard Walton, John Horsler, Steven Huband, Dave Hammond</i>
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Review date: this assessment needs to be reviewed and updated should anything change, should people raise any concerns, or at least once every week
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Approved by (HoD or Director)	David Leadley		Signature	
Date	29/05/2020		Position	DPVC for Research (Infrastructure & Ethics)
Review date				

Print and sign a copy, and share electronically with those involved in the ‘critical activity’ which is requiring them to come into the University to work.

Send an electronic copy to your Health and Safety Officer or Health and Safety Adviser.

Complete and position the [Covid 19 Secure Poster](#) in your respective workspace(s).

Standard Operating Procedure for returning to work to carry out ‘Critical Activities’ during Covid-19 lockdown easing period

This guidance sets out the general principles on things to consider before permitting people to return to work to carry out ‘critical activities’ post easing of the lockdown measures. These guidelines have been drafted to mitigate the potential resurgence of Covid-19 in the workplace after re-opening. In essence the general principles will require the University to continue to apply the Public Health England (PHE) guidelines which are:

Social distancing	Workers must follow the guidance on staying at home and away from others (social distancing) . Where they cannot work from home, they must follow the same principles of social distancing while travelling to and from work and while at work. This will require some thought about how the 2m distancing measures can be applied at work. Managers/Supervisors will carry out an assessment of this.
Self-isolation	Anyone who either has a high temperature or a new persistent cough or is within 14 days of the day when the first member of their household showed symptoms of Coronavirus (Covid-19) must not come in to work, but must follow the guidance on self-isolation .
Person at increased risk	Anyone who is at increased risk of severe illness from Covid-19 (‘Clinically Vulnerable’) should continue to follow the ‘strict social distancing’ rules as recommended by the Government and as per the instructions in any advice that they have received from the NHS or their GP during this crisis.
Persons defined on medical grounds as extremely vulnerable	Anyone identified as ‘Clinically Extremely Vulnerable’ will have been advised in a letter from the NHS or from their GP/health authority and must follow the guidance on shielding and protecting extremely vulnerable people .
Living with a person in one of the above groups	Anyone living with a person who is at increased risk of severe illness (‘Clinically Vulnerable’), or an ‘Clinically Extremely Vulnerable’ person who is shielding from Coronavirus (Covid-19), should stringently follow the guidance on social distancing and minimise contact outside the home.
If someone falls ill	<p>If someone develops a high temperature or a persistent cough while at work, they should:</p> <ul style="list-style-type: none"> • Ensure their manager or supervisor is informed (via telephone preferably) • Return home immediately • Avoid touching anything • Cough or sneeze into a tissue and put it in a bin, or if they do not have tissues, cough and sneeze into the crook of their elbow. • Arrange a Covid-19 test as per the Covid-19 testing guidance. <p>They must then follow the guidance on self-isolation and not return on to site until their period of self-isolation has been completed or test has been proven negative.</p>

The University will:

Share all Risk Assessments and SOPs with staff and encourage staff to comment on and influence the content of the assessments and the associated control measures.

Continue to have an operational emergency team in place comprising of essential staff to respond to any emergency.

Establish procedures for alert and outbreak verification to receive early warnings should the virus appear on campus.

Utilise existing communication channels for the drafting of situation reports, briefings, back-up of information, etc. for internal and external stakeholders.

Follow its existing contingency plans which address the impact of potential resurgence of disease in the workplace after re-opening including a mechanism for identifying triggers that could change the current approach being adopted.

Carry out building assessments to consider safety arrangements (2 metre distancing, hand washing, sanitiser, barriers, screens, access controls, etc.) in communal and shared spaces, including entrances, exits, stair wells, lifts, corridors, toilets, showers, locker rooms, kitchens and rest areas.

Managers / Supervisor Responsibility

The first principle will be to decide whether work activities are 'critical' and should recommence or whether there are other ways of completing that work, e.g. continued working from home.

Managers otherwise will need to complete the above risk assessment of the Covid-19 hazard which will consider the spaces that they have people working in and determine whether they can maintain 2 meter distancing in that space whilst carrying out the required work activities.

Where people are continuing to work from home, whether using a desktop PC, laptop or with paper-based activities, then the work is generally 'low-risk' and they should continue to use the guidance available for [Working from Home](#).

For work activities that can only be conducted by coming in to work and deemed 'critical', then the risk control measured and general principles within this document need to be applied by everyone.

Sharing Information with Staff

Line Managers will complete the above risk assessment and a completed copy of the risk assessment outlining the control measures that need to be put into place to permit 'critical activities' to be carried out on campus will be provided to all those involved in the 'critical activities'.

The following guidelines need to be followed by every person coming on to campus in order to try to prevent a resurgence / spread of the Covid-19 infection. A copy of these guidelines will also be shared with staff.

If Staff have Concerns

If staff are unsure or feel that the control measures are not adequate, or are not working, they should discuss with their manager or supervisor in the first instance. If necessary they can escalate concerns to their Health and Safety Representative and/or their Health and Safety Office/Adviser or the H&S Helpdesk. If necessary they can stop work: **there is nothing so important that it cannot be done safely!**

General principles to be applied for those coming in to work to carry out ‘critical activities’

1. Travel to Work

Wherever possible people should travel to campus alone or with those that they live with using their own transport, or by walking or cycling.

Those that drive to work must:

- Wherever possible park their vehicle in a space away from other vehicles, or park so that cars are not positioned driver door to driver door.
- Consider staggering their arrival and departure times in order to avoid congestion (times will need agreement with a line manager / supervisor).

2. Driving at Work

For those that need to travel whilst at work (i.e. around campus, between campuses or other locations). Wherever possible members of staff should travel alone. If staff have no option but to share a vehicle, then they should:

- Share with the same individuals and with the minimum number of people at any one time
- Wherever possible maintain a distance of two metres and avoid touching their faces
- Maintain good ventilation (i.e. keeping the windows open) and face away from each other during the journey
- Wash their hands for 20 seconds using soap and water or hand sanitiser if soap and water are not available before entering and after getting out of the vehicle
- Regularly clean the vehicle using gloves and standard cleaning products, with particular emphasis on handles and other surfaces which may be touched during the journey.

3. Access to/Egress from Buildings

- Non-essential visitors should not be invited on to campus.
- There will be a reduced building occupancy during this period for each building. Managers will be required to liaise with Estates to determine the occupancy numbers for each space.
- Start and finish times should be staggered to reduce congestion and contact in agreement with your line manager.
- Two meter distancing will need to be maintained on entry and exit from buildings. Follow any signage in place as there could be a change made to the number of access points into the buildings or a one-way system introduced in order to reduce congestion on circulation routes.
- There will be no planned fire emergency evacuations during the lockdown easing period, so if the fire alarm sounds, people will be encouraged to leave the building as normal, using all available exits, rather than congregating on normal staircases. Any one-way system introduced can be ignored at this time.
- Allow plenty of space between people waiting to enter / leave each building.
- Signage may be in place in certain locations:
 - Floor markings may be put down to ensure 2 metre distance is maintained between people when queuing
 - Reminding workers not to attend if they have symptoms of Coronavirus (Covid-19) and to follow PHE guidelines
- Entry systems will continue to be in operation as these do not require persons to make personal contact with them.

- People will be encouraged to wash their hands for 20 seconds using soap and water or to use sanitiser when entering and leaving buildings.

- Common contact surfaces in receptions, offices, circulation spaces and door furniture will continue to be cleaned, particularly during peak flow times.
- Persons needing to meet one another will be encouraged to hold gatherings online, or if this is not possible then meetings should be outdoors or in well ventilated spaces where good distancing can also be maintained.
- Where deliveries need to be made, drivers and staff members should wash or sanitise their hands before and after handling.

4. Use of Circulation Spaces and Lifts

- One-way systems may be put into place to avoid congestion and crossing people's paths within a 2m distance. Everyone must follow these (where they are in place) and wherever possible maintain a 2m distance from others.
- Stairs should be used in preference to lifts (with the exception of goods lifts) and, as they are small confined areas, lifts should only be used by one person at a time and only by those staff or students who are unable to safely use the stairs during this period.

5. Personal Hygiene

- Staff should not come in to work if showing symptoms of Covid-19 and should self-isolate for 14 days if other members of their household have symptoms until a test has determined that it is not Covid-19. (See University Covid-19 testing guidance).
- Avoid skin to skin and face to face contact.
- Staff must follow the hand washing guidelines and regularly wash hands with soap and water.
- Those that are required to wear protective gloves for their work to ensure they are removed so to avoid cross-contamination.
- Tissues and other waste to be disposed of in local waste bins regularly.
- Staff to follow the Government's advice: Catch it, Bin it, Kill it



6. Hand Washing

- The University will ensure that there is an adequate supply of soap and fresh water to wash hands regularly. Staff to wash their hands with soap and warm water for at least 20 seconds each time.
- The University will provide hand sanitiser (minimum 60% alcohol based) where hand washing facilities are unavailable.

7. Toilet Facilities

- In most locations around campus it will be impossible to restrict the number of people using toilet facilities at any given time. That said, if required to queue, anyone queuing should ensure 2 metre distancing is maintained and as much space is permitted to circulate otherwise within the toilet facilities themselves.
- Everyone must wash their hands following the Hand Washing guidance after using the toilet facilities and should dry their hands properly.
- Cleaning regimes for toilet facilities, particularly door handles, locks and the toilet flushes will be maintained.
- Cleaning staff will empty toilet facility waste receptacles regularly.

8. Cafes and Rest Areas

Cafes on campus will be offering a reduced service during the lockdown easing period, possibly just a take away option at times, and some will remain closed. Where possible staff should bring their own food to work and return to their work locations (where safe to do so to consume food) and eat there, or at some other external space away from others.

- Staff will observe 2 metre distancing measures whilst queuing.
- People should stagger break times to reduce congestion.
- Drinking water will remain provided with enhanced cleaning measures of the tap mechanism.
- Those using shared kitchens should frequently clean surfaces that are touched regularly, using standard cleaning products e.g. kettles, refrigerators, microwaves.
- Hand cleaning facilities or hand sanitiser should be available at the entrance to any room where people eat and should be used by workers when entering and leaving the area.
- All rubbish should be put straight in the bin and not left for someone else to clear up.
- Crockery, eating utensils, cups etc. should be washed and dried between uses.
- Payments should be taken by contactless card wherever possible.
- Canteen staff should wash their hands often with soap and water for at least 20 seconds before and after handling food.
- Staff within café areas and rest rooms will need to monitor compliance.

9. Waste Disposal

- Cleaning staff to regularly empty any local waste bins into the larger waste receptacles so that they can be regularly disposed of.
- Cleaning staff will regularly empty toilet facility waste receptacles so that any hand towel rubbish does not accumulate.

10. Changing Facilities, Showers and Drying Rooms

There are a number of buildings that have changing facilities, showers and areas for drying clothes.

- Based on the size of each facility, the number of people that may use these facilities at any one time will be displayed on the outside to maintain a distance of two metres.
- A staggered start and finish times should reduce congestion and contact of these facilities.
- Facilities will be cleaned throughout the day and at the end of each day.
- Use any rubbish bins provided as these will be regularly emptied and the waste disposed of.

11. First Aid and Emergency Service Response

The primary purpose of First Aid is to preserve life and first aid should be administered if required and until the emergency services attend.

When planning work activities, a check should be made that there is an adequate provision of first aid resources. Not all staff will be returning to work, so check who is in and who may be able to provide support at the times you are going to be in work.

- Security staff are all First Aiders, but this is not their only role on campus, so if you are planning to conduct high-risk work, consider whether the work should be delayed or provide additional competent first aid resources.
- Consideration must also be given to potential delays in emergency services response, due to the current pressure on resources.

12. Cleaning

Enhanced cleaning procedures will be in place across campus, particularly in communal areas and at touch points including:

- Taps and washing facilities.
- Toilet flush and seats.
- Door handles and push plates.
- Hand-rails on staircases and corridors.
- Lift and hoist controls.
- Machinery and equipment controls.
- All areas used for eating must be thoroughly cleaned at the end of each break and shift, including chairs, door handles, vending machines and payment devices.
- Rubbish collection and storage points should be increased and emptied regularly throughout and at the end of each day.
- Staff are responsible for cleaning of their own telephones, keyboards, desks and equipment in their immediate vicinity.
- Local arrangements should be implemented by managers for cleaning photocopiers and other office equipment.
- Local arrangements should also be implemented by managers for cleaning workshop and laboratory machinery, equipment or controls.
- In high hazard spaces, cleaning will be the responsibility of the space users unless there are arrangements in place with Campus Cleaning Services.

Useful Links:

1. [University of Warwick Health and Safety Services](#)
2. [Government Guidance on Working Safely](#)
3. [Health and Safety Executive](#)
4. [TUC](#)

To contact Health and Safety Services e-mail:

HealthSafetyHelpDesk@warwick.ac.uk

Appendix - Plan for Phased Reopening - X-ray Diffraction RTP

22nd May 2020

- **Phase 1:** *how long to get machines running, maintenance carried out etc. What the RTP could achieve with a skeletal staff (i.e., how much research is waiting/partially complete, what industry contracts are waiting, how many users would have samples you can collect to help progress their research). What timescale could the RTP realistically run at like this before new research samples required from researchers working on site? Who could potentially benefit from the RTP being in this form of operation?*

Starting Phase 1 will only be done when we are sure that Chemistry and Physics, our main users, will be close to starting their own phased reopening, so that samples will be generated for submission to the RTP once the machines are up and running. Assuming no issues arise, the instruments can be switched on relatively quickly, needing anywhere from 5 minutes to overnight to become operational. Only a limited subset of the instruments would be turned back on from the start, since the X-ray RTP is heavily reliant on its users for samples, both internal and external, and they may not immediately be fully operational and producing samples. We anticipate this to be the SAXS, 1 powder instrument (with sample changer), both single-crystal diffractometers, the XRF (already in standby, so easy to switch on-and-off on-demand) and the high-resolution diffractometers (if samples are available). As demand increases, we would revisit which machines are needed and adjust our plans accordingly.

Estates support may be required as we are reliant on the chilled water system and air conditioning for all equipment to run. Several machines are dependent on the nitrogen gas supply, so it must be ensured that the nitrogen tank is topped up as required by BOC. For this reason, it is important for us to be informed which other facilities in the building also restart in Phase 1.

PPE:

The X-ray RTP PPE safety rules will follow the guidance that is issued by the Physics department, with input from the Chemistry department. We would require access to nitrile gloves, fresh lab coats and other lab consumables during this phase. We have a small supply of gloves in our preparation laboratory, and reassurances have been given that Physics & Chemistry both have supplies of PPE available and supply chains for future requirements. Lab coats are currently shared within the X-ray facility, but for Covid-19 safety, this practice will have to change to individual lab coats. These lab coats will need to be regularly replaced and laundered. One or both of Physics/Chemistry will need to have the facilities for this available. Similarly, lab specs would need to be issued on an individual basis, but these can be easily decontaminated in either isopropanol or soapy water. One of the first tasks in Phase 1 would be to make an inventory of the PPE that is currently in the laboratories and ensure that it is fit for purpose, sourcing additional PPE from Physics/Chemistry stores as required.

MAS 3.13 has a hand/eye wash station available, and others are available in MAS 3.04, MAS 3.05, MAS 3.08, and MAS 3.16. It is assumed that Estates and/or Physics/Chemistry departments will be maintaining the soap supplies in these and any other areas, e.g. toilets, as well as providing additional hand sanitiser stations as identified by the building risk assessment. Assurances have been provided to us that hand sanitiser is being produced in sufficient quantities for the university by the Chemistry department.

Space Requirements:

The MAS building is shared between the Physics and Chemistry departments, as well as the RTPs. Estates are also responsible for the operation of the building. This therefore creates a strong requirement for a cross-department solution to the MAS building, to ensure a safe working environment including implementing schedules for researchers, one-way systems (as appropriate), ensure sufficient cleaning and that facilities such as toilets are available. Guidance will be provided by Physics/Chemistry/Estates for shared areas and this will be circulated to all members of the X-ray RTP team. This document details the needs of the X-ray RTP and those considerations which are within our control.

a) Laboratory Space

To ensure social distancing, each laboratory area will have a maximum occupancy (applicable in both Phases 1 and 2), which are as follows:

- MAS 3.10 – High-resolution XRD – Max 1 person, staff can load samples then work remotely for most of the time.
- MAS 3.11 – Single-crystal / XRF – Max 1 person. Again, there is the expectation that staff would only be present to mount samples and then operate the instruments remotely, wherever possible. Excepting maintenance.
- MAS 3.12 – Prep lab – 2 people max, assuming at opposite ends of the laboratory.
- MAS 3.13 – Powder X-ray Room / SAXS – 2 people max. SAXS and 1 Powder machine operating initially, with users loading samples then operating remotely, wherever possible.

Guidance will be provided by Physics/Chemistry/Estates for shared areas and this will be circulated to all members of the X-ray RTP team. Subject to this guidance, we envisage access routes into the facility would be from the dirty corridor into all areas except MAS 3.10, which would be accessed via the open plan office (MAS 3.09) to avoid having to enter via MAS 3.11, which would be difficult if it was already occupied. All other doors from the laboratories into MAS 3.09 would be closed. Rules in the corridors and stairwells, will be decided by Estates.

A regular cleaning regime in the laboratories would be instigated, using isopropanol in either a spray, with tissue, or in dedicated wipes if available. We will impose a clear rule that keyboards, mice, door handles, and microscopes (and any other applicable surfaces) be wiped down before and after use. In Phase 1, the number of staff would be limited to RTP staff, so the chance of cross-contamination would be reduced.

Staff would require access to basic facilities for, e.g. making tea/coffee and storing lunch (i.e. a fridge) as it is assumed that the cafés on campus would not be open. It is also assumed that the kitchen areas would not be used for sitting and eating. Again, this is part of discussion with Physics/Chemistry and Estates.

b) Staff & Office Space

Our ethos is that we will always operate with the minimum attendance required. Work will be batched up to reduce attendance time to the minimum. If there are no measurements or planned maintenance on a specific day we will be working from home.

However, when the X-ray RTP staff (David Walker, Steve Huband & Dave Hammond (50% with Polymer RTP)) are in-the-office for experimental work, it is not always practical for the staff to simply set measurements up and leave campus, especially as both DW and DH live a significant distance from campus. Therefore, the RTP requires a socially distanced desk each, as the nature of the work requires us to potentially be in the office for significant periods of time to run experiments and maintain equipment. E.g. it makes more sense to run five 1-hour experiments (requiring manual change of sample) in one day, than on 5 separate days.

Currently, the RTP staff occupy a “pod” at the kitchen end of the MAS 3.09 open plan office. The other occupants are from Physics (Beanland, Duffy, Hase, Lloyd-Hughes and Thomas groups) and Chemistry (Gibson group). Most of these other occupants can either work remotely or, in line with Physics and Chemistry Department policies, only in the building to undertake experimental work in the laboratories. Therefore, we do not expect any significant occupancy of the open plan office beyond the RTP staff, especially in Phase 1. However, all 3 staff cannot occupy the pod at the same time, as it would not respect social distancing guidelines, and neither can they hot desk.

Therefore, our proposal, which requires consultation with Physics/Chemistry is for 1 member of the X-ray RTP staff in our pod in 3.09 at any one time and another potentially using Pam Thomas’s office (MAS 3.02), which she has kindly offered. We will rota breaks to ensure no more than one person will be using the ‘pod’ at any time

Internal work & Samples:

It is anticipated that it would not be sustainable to keep the RTP running for more than a few days without users producing new samples for study. For internal researchers this will rely on their own laboratories being

opened and the equipment needed for sample preparation being accessible. However, individual machines could easily be turned on to accommodate specific projects during this period. Some users may have samples that were prepared before the shutdown which could easily be measured, but we have not had any specific requests.

In Phase 1, RTP staff would be responsible for running all Powder and SAXS samples. The sample submission process would be via an online form, based on an existing form for the SAXS which will be adapted to cover XRD too. Experiments would be scheduled in using our existing online booking system and the users given a slot in which to “drop” their samples in the submissions box, to reduce the risk of multiple users dropping samples off simultaneously. This box is in the prep lab (3.12) and cannot be located elsewhere in the building, because of the requirements for chemical safety.

In Phase 2, powder diffraction would be opened to superusers running on behalf of their groups, which would minimise the number of users in the X-ray facility, whilst meeting the increasing demand.

External Work:

We had several industrial contracts waiting for the SAXS (Infineum, Nanopore Tech, BP, Birmingham) and they have all been contacted and we are awaiting responses. However, it is not clear whether they are not also shutdown or that their priorities have now changed. If we did restart a machine for commercial work, there would need to be a procedure sending and receiving samples, one of Physics/Chemistry stores would be required to be open.

Important Maintenance Work

It should be noted that a Malvern Panalytical Engineer will be required to attend the premises, from w/c 15th June, for a minimum of 2 weeks, to complete the £135k upgrade to our Panalytical Empyrean X-ray diffractometer to hard Mo radiation. The upgrade is business critical, as the funding must be spent by the end of the financial year, August 1st. During this time, a member of X-ray RTP staff would also need to be on-site for contractor supervision/safety.

This work was in progress prior to the shutdown and was originally going to involve an expert engineer attending from the Czech Republic. Since this is now unfeasible, due to a likely 4 weeks of quarantine and difficulty of accommodation, the local UK engineer (Wolverhampton, no accommodation required) will now attend with remote support from the Czech Republic.

This work is extremely hands-on requiring sensitive adjustments, by trial and error, of the X-ray optics to ensure they are fully aligned. The instrument is located in MAS 3.13, in the corner next to the open plan office. The engineer will consider this section of the room his space for the duration, with no other users allowed to enter this area, although he would require a space to take breaks/eat lunch. He would be responsible for his PPE (excepting gloves) and decontaminating the area at the start and end of the day, using the IPA which we would provide. Malvern Panalytical have provided us with a suitable risk assessment and a copy of their current liability insurance, and we are keeping them informed of our plans for operating safely, including building access arrangements.

For operational reasons, other engineers may be required to attend campus for maintenance visits. This will be a last resort, where remote support cannot be provided. In line with procedures, a full risk assessment and current liability insurance will be provided by the company.

• **Phase 2:** *What samples and quantity of work could the RTP carry out on behalf of users to minimize risk? Would there be one or two key users relying on hands-on use of the technology who could be given priority on the machines and what research would this support? What timescale range would the RTP be able to operate and what would be the limitations (in terms of sample numbers, finances etc.)? Who could potentially benefit from the RTP being in this form of operation?*

In this phase, the aim would be to maintain social distancing whilst carrying out as much activity as is possible in a safe manner – this would not be our full service. It is anticipated that the RTP staff would begin to spend more time in the building, as they would need to oversee the equipment and users in case of issue. Almost all the measures already established in phase 1, would continue. Most samples on the SAXS instrument are already run by Steve on behalf of users and this would continue. For powder XRD, the sample drop-off system would also continue, with RTP staff mounting samples for remote collection and analysis. However, as demand increases, for the larger research groups we would be happy for 1 or 2 trusted users to gather samples from their group and load the autochanger themselves, in order to increase productivity and reduce load on the RTP staff as demand increases. This would all be scheduled centrally by the RTP staff to avoid clashes of users trying to enter the facility at the same time. In any case, it is anticipated that similar social distancing measures would be in place in our user's laboratories, slowing the rate of production of samples compared to prior to the shutdown.

Even in this phase, we may not meet all demand since the five individual powder instruments offer different capabilities and need more intervention in their use for more specialist measurements (e.g. variable temperature or gas flow), so later in Phase 2 we would consider switching on other instruments for individual, already-trained, users to operate. This would be done only when we are confident of our safe operating procedures and that the strict social distancing can be maintained.

The single-crystal and high-resolution XRD would continue to be run by ourselves and a couple of trusted users (e.g. Guy Clarkson) as a service. Users would schedule time on the machines, to avoid conflict due to the limited number of occupants of the rooms. Samples would be loaded and then measurements made remotely, as in phase 1.

We believe that this will enable us to operate in a safe manner for an indefinite period until Phase 3 is reached. However, by necessity the throughput of the RTP would be reduced compared to business as usual, which would have an impact on the financial plan, although we cannot estimate this at present. Most of our users would benefit from this scenario and we would look to ease the restrictions as we enter Phase 3 (normal operation) and the guidance changes. We would continue to look to take on external industry work during this period.

Whilst we can adequately control access to our laboratories, a concern is how the open plan office (MAS 3.09) and other shared spaces which the RTP shares with several groups from Physics and Chemistry would work in terms of social distancing as activity ramps up in the building. At least one member of RTP staff would be required for trouble shooting and need a desk available. Ongoing discussions with both Physics and Chemistry would be needed on this issue.