

COVID-19 research safety requirements

The Advisory Committee on Dangerous Pathogens (ACPD) has agreed on a provisional classification of SARS-CoV-2 as a Hazard Group (HG) 3 pathogen, and as such, any research work with the virus or with samples known to contain the virus, must be conducted in a containment level 3 (CL3) laboratory. This may change in future if a vaccine and/or effective treatment is found.

In light of the unprecedented and exceptional circumstances posed by SARS-CoV-2, ACDP and HSE have agreed on a risk-based proportionate approach, where certain diagnostics and research activities can be undertaken within a Micro Biological Safety Cabinet (MSC) at containment level 2 (CL2).

In order to clarify safety containment level requirements, below is a list of activities that must be conducted within a CL3 laboratory and diagnostics activities that, subject to risk assessment, may be conducted within a CL2 laboratory. Please consider the aspects below and the laboratory space you have access to when planning your COVID-19 research projects.

In addition, please note that SARS-CoV-2 is currently being considered as a candidate organism to be added to Schedule 5 of the Anti-Terrorism, Crime and Security Act and therefore additional security arrangements will be required as and when the virus is added to the aforementioned schedule within the Act.

1. Work to be conducted at CL3

The following work must be conducted at CL3:

- any work with samples for confirmation of known or presumptive positives of SARS-CoV-2
- any propagation, culturing or deliberate work on SARS-CoV-2

2. Work that may be conducted within an MSC at CL2

Following completion of a suitable and sufficient risk assessment, the following work with samples potentially containing SARS-CoV-2 may be conducted within an MSC at CL2:

- preparation of specimens for molecular testing (for example respiratory virus PCR) prior to sample inactivation.
- division, aliquoting, or diluting of respiratory tract specimens, faecal specimens, urine specimens, and tissue specimens in which the virus has not been inactivated.
- Aliquoting and preparation of blood samples from suspected COVID-19 patients.

Note that waste routes for disposal of samples and/or contaminated material must be appropriate for HG3 organisms.

General safety precautions such as training, access control, spill and emergency procedures must be defined and form part of the risk assessment.

Please contact the Safety Department biosafety@imperial.ac.uk for further advice.