**RCSI Risk Assessment for handling COVID-19**

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| RCSI Campus: |  |
| Location(s) / Room No(’s): |  |
| Principal Investigator: |  |
| Laboratory manager/Supervisor: |  |
| Project title: |  |
| Date: |  |

## 1.0 Hazard identification

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| **Instructions:** *Provide a brief overview of the laboratory work and summarize the laboratory activities to be conducted that are included in the scope of this risk assessment.* | |
| Describe the biological agents and other potential hazards (for example, transmission, infectious dose, treatment/preventive measures, pathogenicity). |  |
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| Describe the laboratory procedures to be used (for example, culturing, centrifugation, work with sharps, waste handling, frequency of performing the laboratory activity). |  |
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| Describe the types of equipment to be used (personal protective equipment [PPE], centrifuges, autoclaves,  biological safety cabinets [BSCs]). |  |
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| Describe the type and condition of the facility where work is conducted. |  |
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| Describe relevant human factors (for example, competency, training, experience and attitude of personnel). |  |
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| Describe any other factors that may affect laboratory operations (for example, legal, cultural,  socioeconomic). |  |

**2.0 Evaluation of risks**

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| **Instructions:** *Describe how exposure and/or release could occur.* | |
| What potential situations are there in which exposure or release could occur? |  |
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| What is the likelihood of an exposure/release occurring?  Unlikely: not very possible to occur in the near future.  Possible: feasible to occur in the near future  Likely: very possible to occur in the near future. |  |
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| What is the severity of the consequences of an exposure/release (negligible, moderate, severe)? |  |

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| **Instructions:** Evaluate the risk and prioritize the implementation of risk control measures. Circle the initial (inherent) risk of the laboratory activities before additional risk control measures have been put in place. | | | | | | | | |
|  | | **Likelihood of exposure/release** | | | | | | |
| Unlikely | | Possible | | | Likely | |
| **Consequence of exposure/release** | Severe | Medium | | High | | | Very high | |
| Moderate | Low | | Medium | | | High | |
| Negligible | Very low | | Low | | | Medium | |
| **Laboratory activity/procedure** | | **Initial risk**  **(very low, low, medium, high, very high)** | | **Is the initial risk above the tolerance level?**  **(yes/no)** | | | **Priority (high/medium/low)** | |
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| Select the overall **initial** risk. | | ☐  Very low | ☐  Low | | ☐  Medium | ☐  High | | ☐  Very high |
| Should work proceed without additional risk control measures? Please circle | | Yes No | | | | | | |

**3.0 Risk control Strategy**

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| **Instructions:** List any requirements that have been prescribed by international and national regulations, legislation, guidelines, policies, and strategies on biosafety and biosecurity. | |
| Describe the measures required by national legislation or regulations (if any). |  |
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| Describe the measures advised by guidelines, policies and strategies (if any). |  |

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| **Instructions:** Describe the resources available for risk control and consider their applicability, availability, and sustainability in the local context, including management support. | |
| Are resources sufficient to secure and maintain potential risk control measures? |  |
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| What factors exist that may limit or restrict any of the risk control measures? |  |
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| Will work be able to proceed without any of the risk control measures; are there alternatives? |  |

**4.0 Select and implement risk control measures**

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| **Instructions:** Describe where and when risk control measures are needed, the level of residual(remaining) risk when these risk control measures are in place, and an assessment of the availability, effectiveness, and sustainability of the risk control measures. | | | | |
| **Laboratory activity/procedure** | **Selected risk**  control measure(s) | **Residual risk** (very low, low, medium, high,  very high) | Is the residual  risk above the tolerance level?  (yes/no) | Are risk control measures available, effective, and sustainable?  (yes/no) |
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**5.0 Review risks and risk control measures**

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| **Instructions:** Establish a periodic review cycle to identify: changes in laboratory activities, biological agents, personnel, equipment or facilities; changes in knowledge of biological agents or processes; and lessons learnt from audits/inspections, personnel feedback, incidents, or near misses. | |
| Frequency of the review |  |
| Person to conduct the review |  |
| Describe updates/changes |  |
| Personnel/procedures to implement the changes |  |
| **Reviewed by** (name and title) |  |
| **Reviewed by** (signature) |  |
| **Date** |  |

**Adapted from the World Health Organization Laboratory Biosafety and handling of COVID-19.**

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**Please forward to** [**biosafety@rcsi.ie**](mailto:biosafety@rcsi.ie) **for review and approval.**