

# Working with Hazardous Biological Material Procedure

# **Section 1 - Purpose and Scope**

- (1) This Procedure outlines requirements at The University of Queensland (UQ) for conducting work with hazardous biological material or potentially infectious microorganisms. The definition of "hazardous biological material or potentially infectious microorganism" for the purposes of this Procedure is provided in the appendix.
- (2) Hazardous biological material or potentially infectious microorganisms have the potential to cause harm to humans, animals, plants and the environment if not correctly contained and handled during research activities. As such, any work with hazardous biological material or potentially infectious microorganisms in any premises owned or controlled by UQ must be managed according to this Procedure.
- (3) This Procedure applies to all UQ workers including staff, students, visitors, volunteers and contractors working with hazardous biological material or potentially infectious microorganisms at UQ. For the purposes of this Procedure, the definition of UQ workers is broad to support UQ's responsibilities under the Work Health and Safety Act 2011. The definition of UQ workers is provided in the appendix.
- (4) This Procedure supports and should be read in conjunction with UQ's <u>Biosafety Policy</u> and other relevant procedures (e.g. <u>Low Risk Genetically Modified Dealings Procedure</u>, if the material is also genetically modified).

#### Context

(5) All workers at UQ have a duty under the <u>Work Health and Safety Act 2011</u> to ensure that the risk of exposure to any hazardous material is eliminated or minimised as far as possible. This includes prevention of exposure of people or contamination of the environment with hazardous biological material.

# **Section 2 - Process and Key Controls**

- (6) UQ workers must comply with the following measures when working with hazardous biological material or potentially infectious microorganisms at UQ:
  - a. Before commencing work, UQ workers must follow appropriate risk management procedures, and be properly trained (UQ online Biosafety training and specific training determined by the supervisor) and assessed competent by their supervisor to work with hazardous biological material or infectious microorganisms.
  - b. Undergraduate students, volunteers and visitors must be supervised at all times by a UQ worker authorised by UQ's Institutional Biosafety Committee (IBC) while undertaking work with hazardous biological material or potentially infectious microorganisms.
  - c. Work with hazardous biological material or potentially infectious microorganisms must not commence without prior approval from UQ's Institutional Biosafety Committee (IBC) to ensure the proposal complies with the relevant classification criteria (known as "High Risk Biological Approvals").
  - d. Chief Investigators are primarily responsible for the oversight of High Risk Biological Approvals at UQ, including the application process and ongoing management of the approved activity.

e. Work with hazardous biological material or potentially infectious microorganisms at UQ must be performed in a level 2 or higher certified physical containment facility (PC2), as appropriate to the risk group classification of the material.

# **Section 3 - Key Requirements**

## **Training and Risk Management**

- (7) Before conducting any work with hazardous biological material or potentially infectious microorganisms, UQ workers must:
  - a. undertake the appropriate induction training as required (refer to the <u>staff health and safety training and induction website</u> and the <u>Induction and Training Needs Assessment Checklist</u>);
  - b. complete a risk assessment(s) and familiarisation with any standard operating procedures;
  - c. obtain approval from the UQ IBC (refer to 'Approval Process' provisions of this Procedure); and
  - d. comply with the conditions stipulated in the IBC's approval of the work.

## **Approval Process**

- (8) Work with hazardous biological material or potentially infectious microorganisms, as defined in this Procedure, is not permitted at UQ without prior approval from the UQ IBC. Applications to work with hazardous biological material or potentially infectious microorganisms must be made to the IBC by the Chief Investigator using the Lab Activity Application Register in <u>UQSafe</u>.
- (9) The Chief Investigator must provide sufficient information within the application to allow the IBC to determine whether the proposed dealing meets the relevant classification criteria.
- (10) All approved work with hazardous biological material or potentially infectious microorganisms must comply with any conditions stipulated in the IBC's High Risk Biological Approval of the work.

#### **Compliance with High Risk Biological Approvals**

- (11) Chief Investigators and UQ workers are responsible for monitoring all aspects of work authorised under a High Risk Biological Approval. In conducting work with hazardous biological material or potentially infectious microorganisms, Chief Investigators must:
  - a. ensure that the work complies with the conditions of the IBC's approval and is conducted in a certified physical containment facility appropriate for the risk group of the material being used (i.e. PC2 for risk group 2 material, PC3 for risk group 3 material);
  - regularly monitor and review the work until the High Risk Biological Approval is closed by the Chief Investigator, a UQ Biosafety Advisor or the IBC (to close a High Risk Biological Approval, all materials must have either been transferred to another approval, reviewed and assigned a new IBC number for continuation (if required) or destroyed);
  - c. ensure correct storage of all hazardous biological material or infectious microorganisms;
  - d. ensure correct disposal of all hazardous biological material or infectious microorganisms and associated waste; and
  - e. inform UQ's Biosafety Advisors if movement to another facility not listed on the approval as required.

## **Reporting Breaches**

(12) Any actual or potential breaches of conditions associated with the use, storage or handling of hazardous

biological material or potentially infectious microorganisms must be reported as soon as practicable to UQ Biosafety Advisors (biosafety@ug.edu.au).

# Section 4 - Roles, Responsibilities and Accountabilities

# **Institutional Biosafety Committee**

(13) The IBC will undertake duties in accordance with its Terms of Reference and the <u>Biosafety Policy</u>. The IBC's responsibilities include:

- a. assessment and approval of applications for work with hazardous biological material or potentially infectious microorganisms;
- b. assisting Chief Investigators determine classification of work covered under this Procedure; and
- c. providing UQ workers with education, information and support to enable them to understand their biosafety compliance obligations at UQ.

## **Chief Investigators**

(14) Chief Investigators are responsible for the ongoing monitoring, management and oversight of work with hazardous biological material or potentially infectious microorganisms, and must ensure:

- a. activities are conducted in appropriate facilities and that the facilities are tested, serviced and maintained to comply with the Office of the Gene Technology Regulator (OGTR) or IBC requirements;
- b. a High Risk Biological Approval from the UQ IBC is in place prior to commencing work;
- c. records are maintained in accordance with facility certification or IBC approval requirements;
- d. UQ workers that handle, store or use high risk biological material:
  - i. are trained in accordance with UQ IBC requirements; and
  - ii. comply with all conditions of approval from the IBC and/or for the use of the containment facility, including supervision of any classes of person not authorised by the IBC to work unsupervised with the material (including undergraduate students, visitors and volunteers); and
- e. High Risk Biological Approvals are reviewed and extended or closed where necessary.

## **Heads of Organisational Units**

(15) Heads of Organisational Units that undertake work with hazardous biological material or potentially infectious microorganisms must work with Chief Investigators to ensure containment facilities are compliant with OGTR or IBC requirements, including:

- a. facilities appropriate for the type of work are available and maintained in compliance with the relevant legislative requirements (e.g. PC2 certified facilities maintained to OGTR certification requirements, including funding and arrangements for maintenance, routine testing and servicing); and
- b. any work with material considered hazardous biological material or potentially infectious material is conducted in compliance with requirements detailed in this Procedure, facility certification guidelines or IBC approvals (e.g. all work has appropriate approvals in place before commencing, all UQ workers have completed appropriate training prior to commencing work).

#### **UQ Workers**

(16) All UQ workers working with hazardous biological material or potentially infectious microorganisms at UQ must comply with this Procedure, understand and comply with any additional IBC requirements, and ensure they are:

- a. following the requirements for the facility being worked in (i.e. complete relevant training, comply with PPE requirements etc.); and
- b. aware of any approvals that are in place for the work they are conducting.

(17) UQ workers handling, using or storing hazardous biological material or potentially infectious microorganisms at locations external to UQ, must comply with the local procedures and requirements of the external organisation.

## **Health, Safety and Wellness Division**

(18) The Health, Safety and Wellness Division is responsible for:

- a. providing UQ workers with education, advice and support regarding requirements for working with hazardous biological material and potentially infectious microorganisms and relevant regulatory compliance obligations at UQ; and
- b. assessing whether Organisational Units and UQ workers are able to demonstrate compliance with this Procedure and that any compliance issues identified are rectified in a timely manner.

(19) Biosafety Advisors within the Health, Safety and Wellness Division are responsible for:

- a. advising workers about specific biosafety matters affecting UQ, including workplace safety obligations and regulatory compliance; and
- b. reporting to or advising UQ's IBC on hazardous biological material and potentially infectious microorganisms as required.

# **Section 5 - Monitoring, Review and Assurance**

(20) UQ Biosafety Advisors will provide ongoing monitoring and review of UQ's biosafety systems and controls on behalf of the IBC, including:

- a. annual audits and inspections of OGTR or IBC certified facilities where work with hazardous biological material or infectious microorganisms is undertaken;
- b. renewal of any associated facility certifications; and
- c. renewal of any associated GM dealings or licences.

(21) UQ Biosafety Advisors will review this Procedure as required to ensure it remains current and accurately reflects regulatory requirements.

## **Non-compliance**

- (22) UQ workers and Chief Investigators that do not comply with this Procedure will be subject to corrective actions from the IBC and/or the Health, Safety and Wellness Division, and suspension of work if conditions are not met.
- (23) UQ may be subject to corrective actions or notices issued by the OGTR to suspend work that does not comply with regulatory requirements, if the work is conducted in OGTR certified facilities, or if there are associated GM dealings.

# **Section 6 - Recording and Reporting**

(24) Chief Investigators must ensure that the record-keeping requirements of approved High Risk Biological Approvals are met in accordance with UQ's Research Data Management Policy.

(25) UQ Biosafety Advisors will report outcomes of audits of OGTR or IBC certified facilities where work with hazardous biological material or infectious microorganisms is undertaken to the IBC on a regular basis (e.g. at each scheduled IBC meeting). The IBC will report any non-compliances or potential breaches to the relevant Deputy Vice-Chancellor, Executive Dean or Institute Director and line management for the relevant area.

(26) The Director, Health, Safety and Wellness is responsible for reporting any matters required by the Act or Regulations, approvals or licences to the OGTR.

# **Section 7 - Appendix**

## **Definitions, Terms, Acronyms**

Term	Definition
Chief Investigator	For the purposes of this Procedure includes supervisors, managers, and academic Principal Advisors that are conducting research at UQ and hold an academic or research appointment.
Hazardous biological material or potentially infectious microorganism	The following classes and types of organisms and biological material may be considered as hazardous:  Risk Group 2 microorganisms* cultured in large volumes (10L or greater);  Risk Group 2 microorganisms which require special precautions*;  Risk Group 3 or 4 microorganisms*;  Infectious/potentially infectious animals, tissues or fluids (involving microorganisms of the categories mentioned above);  Human tissue or body fluids (unless extensively screened for infectious microorganisms, or worker is using their own samples only);  Animal tissue or body fluids that could contain zoonoses or have not been screened for such;  Poisonous or venomous animals (e.g. snakes, spiders, cone-shells);  Biological toxins (excluding toxoids);  Biological material on the Defence Strategic Goods List (DSGL); and  Security sensitive biological material (SSBAs).  * As listed in AS/NZS 2243.3 2022, Section 3 or any microorganism categorized as Dangerous Goods Class 6.2 (Infectious Substances) or those falling under UN2814 & UN2900 in the
IBC	Dangerous Goods Regulations (IATA).  UQ's Institutional Biosafety Committee.
OGTR	Office of the Gene Technology Regulator (Australian Government).

Term	Definition
UQ workers	For the purposes of this Procedure includes:
	staff – continuing, fixed-term, research (contingent funding) and casual staff members;
	contractors, subcontractors and consultants;
	visiting academics and researchers;
	affiliates – academic titles holders, visiting academics, emeritus professors, adjunct and honorary title holders, industry fellows and conjoint appointments;
	higher degree by research students; and
	volunteers and students undertaking work experience.

# **Status and Details**

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