Key Risk Area (KRA)

KRA 1.13 Working with Animals

1. Purpose

This document provides guidance on ensuring all reasonably foreseeable risks to health and safety in laboratory work and facilities are identified, and management strategies are put into place, in order to eliminate or minimise such risks so far as is reasonably practicable.

This document provides guideline for the management of safety and associated compliance obligations within laboratories and similar specialised facilities where higher level hazards may be encountered.

2. Scope

This Guideline applies to all health, safety and wellbeing activities of staff, students, visitors (including volunteers and contractors), Council members, and other persons interacting with the University of Newcastle (workers); the operations of staff, of University aligned Research Centres and controlled entities; and all activities conducted by or on behalf of the University of Newcastle on and outside of the University's campuses.

3. Guidelines

3.1. Regulatory Requirements

The use of animals or animal tissues for educational or research purposes is regulated in Australia by State Government legislation; the NSW Animal Research Act 1985 and Animal Research Regulations 2010 and the Australian Code for the Care and Use of Animals for Scientific Purposes (8th Edition, 2013:NHMRC) (updated 2021), which is known as the "Code" and incorporated by reference into the Animal Research Regulations.

The containment and use of genetically modified animals, animals inoculated with genetically modified material and genetically modified animal cell lines is regulated in Australia by the Gene Technology Act 2000 and Regulations 2001 which is administered by the Office of the Gene Technology Regulator (OGTR).

Note- Guidance on Microbiological requirements can be found in *AS/NZS 2243.3 – Safety in laboratories, Part 3 – Microbiological Safety and Containment.*

Under the Biosecurity Act 2015 the Department of Agriculture and Water Resources (DAWR) requires locations to be approved for a wide range of terrestrial animal, aquatic organism, and products where post-entry quarantine requirements apply. DAWR also requires institutions to obtain a permit for work with exotic organisms even if conducted in containment facilities and

such permits contain special conditions. The Australian biosecurity import conditions (BICON) database on the DAWR website provides information regarding import permits relating to animals and animal products.

The NSW Department of Primary Industries (DPI) Animal Research Review Panel (ARRP) requires institutions that house animals to be accredited as an Animal Research Establishment. This includes dedicated animal facilities and laboratories where animals are housed.

The purchase, use and disposal of radiation apparatuses and materials that may be used for animal work is regulated under the NSW Radiation Control Act 1990 and Regulations 2013 which is administered by the NSW Environmental Protection Agency (EPA). All Radiation work at the University must comply with the conditions of the Universities Radiation Management Licence, KRA 1.9 Radiation Management and associated Radiation Management Plan.

Use of Schedule 8 or Schedule 9 substances, or prohibited drugs/plants for the purpose of research, instruction, analysis, or for the treatment of an animal is regulated under the Drug Misuse and Trafficking Act 1985 and if not in this Schedule, as it appears in Schedule 8 or Schedule 9 of the Poisons Standard. This compliance area is administered by the Pharmaceutical Regulatory Unit of the NSW Health Department.

3.2. Risk Assessment, Management and Safety Review

The general Health and Safety Risk Assessment Form should be used to assess all hazards within a laboratory in accordance with the Guideline HSG 3.1 Health and Safety Risk Management.

Standard Operating Procedures and Risk Assessments must be developed which documents all the known hazards and details the procedures to be followed to ensure the associated risks of the hazards are controlled. Refer to The University of Newcastle Animal Hazards Procedure for more detailed information.

The University has set processes in place to ensure that all research work which takes place at the University and in laboratories has safety approval and human and animal ethics approval where appropriate.
If an activity or project has any associated high-risk hazards or risks to health and safety, including but not limited to radiation, chemicals or dangerous substances, genetically modified organisms or biological hazards, a review by the Health, Safety and Wellbeing Team is required. High risk safety review applications are required to be submitted in Tick@lab, the high risk protocol safety review system and may also be reviewed by the relevant technical committee or subject matter expert for approval for the project or activity to proceed.

Working with Animals has been identified as an area that has a higher risk profile due to the potential consequence to human health and/or the environment. Details of the considerations for the safe management of biologicals in activities for teaching or research activities can be found in KRA 1.2 Biological Management , Animal Services, Obtaining approval for animal research.

The Safety Review Application form is to be used when:

- the activity planned has high risk hazards or risk to health and safety as mentioned above, or
- there is an amendment to a previously reviewed Safety Review application that is within the 5-year expiry time frame.

3.3. Risk Management Principles

The principles of risk management should be applied to all animal work;

1) Identify
2) Assess
3) Control
4) Review

3.3.1 Identification of hazards/risks

This is achieved through consultation and planning of animal activities, through regular safety inspections of areas where animal work is undertaken, and by regular review of existing processes and procedures.

Look at;

- how tasks are done
- how work is designed and managed
- the tools, equipment and objects being used
- existing records and documentation, eg previous risk assessments, recorded incidents in consultation with Health Safety and Wellbeing, regulations
- inspect the physical work environment

Talk to workers;

- consult with your supervisor
- talk to personnel who work in specialised fields, eg Animal Welfare Officers, BioResearch Facilities, animal industry specialists

3.3.2 Assessment of hazards/risks

To minimise risks when working with animals, it is essential to undertake a risk assessment to identify the hazards in your workplace, which may cause harm (death, injury, or illness). A risk assessment involves looking at what could happen if someone is exposed to a hazard and the likelihood of it happening. Risk Assessments should be completed by more than one person where possible, so potential hazards/risks are not missed. Risk Assessments must be signed off at Supervisor level. All personnel working with animals must make themselves familiar with all Risk Assessments and associated documentation as part of their training and induction in their place of work, including offsite and fieldwork environments, KRA 1.3 Fieldwork and Offsite Work.

A risk assessment can help you work out:

- how severe a risk is
- if your control measures are effective
- what action you should take to control the risk
- how urgently you need to take action

The health and safety risk assessment process supports the prioritisation of risks which may have the most significant impact on reducing exposure to harm and achieving objectives.

The Risk Assessment Template must be used to assess all University related activities and tasks. It is a calculation of the likelihood (frequency or probability) of the identified causes of a risk event occurring, and the consequence (impact or severity) of the injury, illness or damage if the risk occurs. The assessment of each risk is determined at both the inherent risk level (risk without internal controls in place) and residual risk level (risk with current effective internal controls in place).

Completing the Risk Management Introduction training module will also help.

3.3.3 Control of hazards/risks

After assessing the risk, you'll need to use control measures. The best way to control risk is to remove the hazard completely. If that's not possible, you must reduce the risk as much as possible.
You can do this by:

- substituting the hazard with something safer, eg safer chemical
- physically separating people from the hazard, eg, fences,
- using engineering controls or equipment, eg, lifting devices, ramps

3.3.4 Review of hazards/risks

Periodically review Risk Assessments and if necessary, re-assess any controls in place. The review date, updates or no updates should be recorded in the Amendment History of the document.

A good guide as to when you may need to review your processes are:

- After any significant change within the workplace or process in question
- After an accident or ill-health incident has occurred
- After near-misses have been reported.

3.3.5 Hazard Identification and Possible Control Measures

***NOTE** – the tables below do not cover all possible hazards, risks or control measures. Each research activity and site is different, hence why Risk Assessments and Procedures need to be written specifically for those activities. Use the tables as a guide on what to consider as hazards, risks and controls.*

Table 1: Allergens and Allergies

KRA Laboratory Safety

Hazard / Risk	Controls
Allergens • particularly animal proteins, urine, and serum	• increasing ventilation can reduce allergen exposure four-fold • air filtering • Screen food supplies for mites

• hair/fur/dander • mould spores in animal feed, hay bales, work environment • dust (e.g., feed, wood products/bedding) • latex particles/gloves (talc) • mites in animal feed *Laboratory Animal Allergy (LAA)* • prevalence: - 7 to 44% of people exposed to laboratory animals, especially rats • smoking and history of allergies may increase prevalence of atopic/allergic disease • allergic rhinitis (hay-fever) accounts for 90% of all symptoms associated with LAA • allergic reaction of lower respiratory tract (e.g., asthma symptoms, coughing, shortness of breath) • allergic dermatitis or contact urticaria (e.g., itchy rash, hives)	• high quality/low dust bedding and feed documented Physical barriers to reduce exposure • training/awareness • pre-employment medical • smoking reduction program • annual monitoring for early detection of Laboratory Animal Allergy (LAA) - lung function tests, and possible blood antibody testing • Pre employment medical and annual health monitoring results arranged through UoN Health & Safety Team • PPE - gloves/gowns/ P2 mask for routine work higher risk activities • glove allergies – reduce use of latex or use non-latex gloves, use non-powdered gloves, use cotton liner • good housekeeping • safe work procedure documents • risk assessment documents

Table 2: Hazardous Manual Tasks and Ergonomics

KRA 2.1 Manual Handling and Ergonomics

KRA 1.7 Laboratory Safety

Hazard / Risk	Controls
• lifting, carrying, pushing, pulling and related activities • handling of animals, goods (e.g., feed and bedding) and equipment such as compressed gas cylinders, trolleys, cages, gates and fences • risk factors: - posture, design of workstation and activity, size/weight of object, animate or inanimate, height, position, duration, frequency, etc. • risk of muscular stress – especially back, shoulders, arms, neck • risk of Occupational Overuse Syndrome from repetitive activities such as scraping or washing cages, or sustained postures (e.g., restraining animals)	• posture and positional awareness – be aware of posture when doing activities • stay active – exercise can help with posture and strengthening core trunk muscles • maintain healthy weight – excess weight can weaken core muscles, place strain on the spine, knees and other joints • wear low heeled, supportive, non-slip appropriate footwear • modify object, size, weight if possible (eg order in smaller animals or smaller bags of feed/bedding) • mechanical restraint of larger animals • training in animal handling techniques • modify actions, movements

• crush injuries could be caused by large animal (eg when corralling animals, or injecting or crutching activities), or arise from over-stacking of feed and bedding	• specific training in animal handling a hazardous manual tasks procedure • team lifting and mechanical aids • care with stacking of heavy bags of feed and bedding, appropriate storage systems, appropriate height and accessibility • good housekeeping – access, egress and exits clear of clutter and rubbish • safe work procedure documents • risk assessment documents

Table 3: Biohazards, Microorganisms, Zoonosis

KRA 1.2 Biological Management

KRA 1.7 Laboratory Safety

KRA 1.8 Gene Technology

Hazard / Risk	Controls
Biohazards • hazard/risk depends on the nature of employment and workplace setting. For example, the specific animal type, whether the colony is Specific Pathogen Free (SPF), whether animals are screened for pathogens, tasks/activities, route of transmission or exposure, susceptibility of worker *Zoonotic diseases* • Zoonosis – an infectious disease of animals that can be transmitted to humans (and humans to animals) • *Appendix A* - examples of zoonoses related to common animal species. *Note:* • Q fever – especially ruminants (goats, sheep) some native animals, rabbits, and especially in pregnant animals • Protozoal diseases – especially rodents, cats, sheep, and non-human primates. Risk if pregnant or immunocompromised • Some zoonoses may have several transfers e.g., Hendra Virus – bats to horses to humans	• quarantine / segregate potentially infectious animals • screen colony for pathogens • reduce potentially high-risk exposure such as needle-stick injury, splash to face/mucous membranes, etc • vaccination of workers if appropriate • use properly maintained biosafety cabinets • correct animal handling and restraint to avoid being bitten • specific training: - including biosafety, animal handling, use of sharps • waste disposal, spill response and emergency procedures • good hygiene practice especially with unscreened human material or animals of unknown infectious status • taking care when cleaning waste avoiding skin and oral contact • identify and use appropriate PPE • good housekeeping & hand hygiene • safe work procedure documents • risk assessment documents

Non-zoonotic diseases • Tuberculosis • Hep B – especially from unscreened human material used in animal research • Other infections resulting from handling animals and sharps	• Respiratory protection • Double-gloving • Cut resistant gloves

Table 4: Hazardous Chemicals

KRA 1.1 Chemical Management
KRA 1.7 Laboratory Safety

Hazard / Risk	Controls
Volatile anaesthetic agents *Isofluorane and Halothane:* • association with psychomotor, hepatic, and renal dysfunction • possible association with increased susceptibility to infection or neoplasm • possible association with miscarriage or foetal abnormalities *Ether:* • highly flammable and explosive in air • must not be used *Euthanasiates eg Lethabarb:* • lethal *Formaldehyde/formalin:* • irritant of respiratory tract and eyes, • allergen/ sensitiser, • carcinogen *Carbon dioxide:* • used for euthanasia • heavier than air, asphyxiant • compressed gas *Oxygen:* • oxidising gas, fire hazard • compressed gas *Scheduled drugs:*	• anaesthetic gas scavenger system • minimise dust, fumes and aerosols using mechanical ventilation, fume hood • regular servicing of equipment • appropriate chemical storage facilities and segregation of chemical types • chemical manifest – Chemwatch or similar • specific training – biosafety and hazardous substances • restraint of gas cylinders • use of appropriate fittings for all gas lines • gas monitoring where required • approval to use prior to purchase – Safety Approval received from WHS (Tick@Lab) • licence for Scheduled Drugs – within expiry • good housekeeping • safe work procedure documents • risk assessment documents

• must only be used according to instructions or on veterinary advice *Cleaning chemicals and disinfectants:* • may be corrosive or irritant in concentrated form *Other lab chemicals:* • cytotoxic chemicals, hazardous substances, or hazardous chemicals	

Table 5: Radiation

KRA 1.9 Radiation Management
KRA 1.7 Laboratory Safety

Hazard / Risk	Controls
• Ionising radiation from radioisotopes and x-ray equipment • Radioisotopes commonly alpha, beta or gamma emitters • risk of internal exposure if radioisotope inhaled, ingested, injected or other direct exposure • risk of external exposure from radioisotopes, irradiating apparatus, non-ionising radiation sources • Non-ionising radiation including laser, UV, electromagnetic • pregnancy / potential pregnancy	• approved area for use of radiation • perspex shielding for beta radiation • lead shielding for gamma and x-ray • radiation training • radiation licence • radiation monitoring, personal dosimeter • waste, spill and emergency procedures • PPE – lead apron, disposable glove • a worker is pregnant or potentially pregnant, evaluate the workplace conditions and implement any necessary additional protective measures • safe work procedure documents • risk assessment documents

Table 6: Other hazards

KRA 1.3 Field Work (offsite activities)
KRA 1.4 Plant and Equipment
KRA 1.5 PPE and Protective Clothing
KRA 1.6 Noise Management
KRA 1.7 Laboratory Safety
KRA 1.10 SCUBA and Water Based Activities
KRA 1.11 Remotely Piloted Aircraft (PRA/Drone) Operations
KRA 1.12 Standard Operating Procedures

Hazard / Risk	Controls
• strong magnetic field from MRI equipment • lasers and equipment containing lasers • bites and scratches from laboratory animals • cuts or puncture wounds – e.g., scalpels, surgical instruments and needles, broken glass • gas cylinders and regulators – leakage or explosion of gases • hazardous manual tasks • electrical shock – e.g., faulty equipment or working in wet environment • thermal – e.g., hot (autoclave), cold (liquid nitrogen or freezer) • noise – e.g., animals, equipment, activities • slips, trips, and falls – e.g., wet floors, animal cage/barriers, unhoused hoses, poor housekeeping • bites, scratches, kicks, and butts • exposure to weather - e.g., sunlight • offensive smells – especially ammonia in urine • stress and grief – arising from emotional attachment to animals, animal euthanasia, ethical considerations	• persons with metal implants/heart pacemakers not to enter rooms containing MRI magnets – facility questionnaire, restricted access, illuminated or flashing light • laser areas and equipment – restricted access, illuminated, flashing light, or signage • facility and equipment maintenance program • adequate air exchange, gas monitors (portable or fixed) • electrical testing and tagging program, equipment inspection & maintenance programs • restricted access • training in animal handling, use of equipment stress controls – consult with supervisor and colleagues, attend training, implement personal coping strategies, seek counselling • restrain animals to reduce risk of bites, scratches, kicks etc – training in animal handling techniques • knowledge of appropriate first aid treatment and how to seek medical advice. • good housekeeping • safety signs • PPE - hearing protection, respiratory protection, hat/sunscreen/long sleeves for outdoor activities,

4. Other Health and Safety Requirements

4.1. Safety Approvals

Approval for Safety Protocols that involve animal work will require approval from some, or all the following areas and committees.

- Animal Care and Ethics Committee (ACEC) - Mandatory
- Head of School, Principal Investigator (PI), or Research Centre for that project
- Health Safety and Wellbeing for Offsite or Fieldwork through Tick@Lab
- Institutional Biosafety Committee (IBC) through Tick@Lab - Mandatory

- Chemical and Radiation Technical Committee (CRTC) through Tick@Lab – if animal work involves the use of chemicals, lasers, radiation
- When planning any research project involving animals, consultation with Animal Services and safetyclearance@newcastle.edu.au is recommended

4.2. Reporting of Hazards, Incidents and Injuries

It is the responsibility of the person involved in the incident, or the person who identified the hazard to use the online incident reporting system to report hazards, near misses or injuries. This system ensures the people responsible receive notification quickly so that an investigation can be completed, and actions taken to reduce the risk.

The Health, Safety and Wellbeing Team are also to be notified so they can follow up and provide assistance when required.

Any illness or injury sustained in association with The University of Newcastle research activities must be reported using the UNSW online reporting system.

Any injury, or any suspected or actual laboratory acquired illness (related to carrying out work with a research-related biological agent) must be reported to the Facility Manager or Head of the research group and to the WHS Biosafety Coordinator.

4.2.1 SafeWork NSW reportable incidents:

Head of School/ Research group or the Laboratory Manager must notify their WHS Business Partner and/or the Health Safety and Wellbeing Team immediately on being notified about a Safe Work NSW reportable incident, which include:

- a person dies
- a potentially dangerous incident occurs
- a person requires immediate hospital admission as an in-patient
- a person requires medical treatment within 48 hours of an exposure to a substance;
- an infection attributed to work with a microorganism, human blood or body substances, animals, animal parts or animal waste products; or
- contracting any of the following zoonotic disease while working with animals, animal parts or animal waste products:
    - Q-fever;
    - Anthrax;
    - Leptospirosis;
    - Brucellosis;
    - Hendra Virus;
    - Avian flu virus; or
    - Psittacosis

5. Definitions

In the context of the Health and Safety Management System Framework:

Employer	Means the University of Newcastle (the University).
Executive Committee	Consisting of the Vice-Chancellor, the Deputy Vice-Chancellors, the Pro Vice-Chancellors, the Chief Operating Officer, Chief People and Culture Officer and the Chief Financial Officer, the University Secretary and the President of Academic Senate.
Facility Manager	A particular person appointed in each Laboratory area to oversee the implementation of all safety requirements. In addition, the Health and Safety Committee or any other party can address any queries to this person during Laboratory inspections. A Leader/Supervisor may be a Facility Manager, or they may appoint a person to manage this area for them, although they remain ultimately responsible.
Induction	Refers to the structured provision of information, instruction and requirements for people who are accessing the Laboratory, in order to ensure they can undertake any activity without risk to their or others' safety or health, so far as is reasonably practicable.
Laboratory	A facility where scientific or technological research, teaching activities, experiments and measurement can be performed within a controlled environment. The facility may be designated as a research, teaching or technical Laboratory.
Leader / Supervisor	Any member of the University who is responsible for supervising staff and/or undergraduate or postgraduate students and/or for leading research projects.
Personal Protective Equipment (PPE)	Anything used or worn by a person to minimise risk to their health and safety, such as safety clothing, footwear, or equipment for specified circumstances or areas.
Worker	Includes an employee, conjoint, student on work experience, contractor, sub-contractor, and volunteer. A person is a worker if the person carries out work in any capacity for the University or another person conducting a business or undertaking, including work as: (a) an employee, or (b) a contractor or subcontractor, or (c) an employee of a contractor or subcontractor, or (d) an employee of a labour hire company who has been assigned to work in the person's business or undertaking, or (e) an outworker, or (f) an apprentice or trainee, or (g) a student gaining work experience, or (h) a volunteer, or (i) a person of a prescribed class.

6. Responsibilities

A comprehensive list of health, safety and wellbeing responsibilities is provided in HSG 1.2 Roles and Responsibilities Guideline.

Specific responsibilities under this Guideline include:

Leaders and Supervisors

- Provide and make financial allocation for appropriate safety resources and risk control measures for staff and, where required, other Workers, students, visitors and others;
- Ensure appropriate risk management procedures are implemented which are relevant for Laboratory work by Hazard identification, through facility inspections and audits and safety review of research project and teaching activities; Risk assessment of the hazards using the University's Risk Assessment Template; and Risk control through providing appropriate facilities, equipment, Standard Operating Procedures (SOPs), induction and training;
- Ensure adequate training and supervision is available, and provided as appropriate, for staff and other Workers, students and visitors working in Laboratories and specialised facilities;
- Ensure procedures are adopted for the maintenance of Laboratory and specialised facilities;
- Communicate the requirements for staff and other Workers, students and visitors to prepare and follow Safe Work Method Statements (SWMS) and SOPs when required;
- Ensure that clear and appropriate signage and access restrictions are in place and enforced where necessary;
- Provide instruction and training so that students, staff, and other Workers and visitors know and understand the requirements of any SWMSs and/or SOPs, and monitor compliance;
- Leaders/Supervisors of research projects or teaching activities which include higher level hazards are expected to submit an application for the Safety Review of the activity to ensure all compliance and safety obligations have been identified and managed;
- Ensure facilities used are appropriate for the work being undertaken;
- Ensure Workers who undertake teaching provide information on identifying hazards, assessing risks and following risk controls relating to Laboratory work for students under their supervision;
- Ensure that Workers who undertake research provide information on identifying hazards, assessing risks and following risk controls relating to Laboratory work for other Workers and students under their supervision; and
- Ensure that effective supervision is provided in Laboratories through the appointment of a Facility Manager for each Laboratory or other specialised facility under their control.

Facility Managers

The Facility Manager has the following responsibilities; however, they are not necessarily the Leader/Supervisor of the Workers and students using the Laboratory. As such, it is essential that Leaders/Supervisors work with the Facility Manager to ensure that all people using the Laboratory are aware of and utilise the required risk control measures.

- Ensure that SWMSs and/or SOPs are provided, maintained and disseminated in their respective Laboratories;
- Ensure all Workers and students receive an induction and have adequate training before being granted access rights and commencing work in the facility;

- Ensure any identified hazards which have not been found/seen to be effectively managed are identified to their Leader/Supervisor;
- Work with Laboratory users to ensure that for each assigned Laboratory area a Laboratory Safety Manual is developed;
- Ensure that the Laboratory Safety Manual is maintained and is up to date and complete;
- Develop and maintain a (general) Laboratory induction package using the Laboratory Safety Manual as a basis;
- Maintain a record of induction of new Laboratory personnel;
- Undertake regular safety walk-throughs and inspections of the Laboratory;
- Participate in safety inspections of the Laboratory by other groups such as Health and Safety Committee members;
- Ensure that, when corrective actions are recommended following inspections, they are implemented and their effectiveness is reviewed;
- Provide technical guidance and support and appropriate training to Laboratory personnel, including hazard identification and risk control; and
- Ensure non-Laboratory Workers such as contractors servicing equipment are suitably inducted and supervised whilst accessing and undertaking work in the facility.

Health, Safety and Wellbeing Team

- Provide advice to the University in regard to the implementation of this document; and
- Support the University community in the referral of issues to the Institutional Biosafety Committee (IBC) and Chemical and Radiation Technical Committee (CRTC) to provide advice and assistance in problem resolution relating to technical issues.

Infrastructure and Facility Services (IFS)

- Ensure services including air handling/extraction, autoclaves, fume hoods, piped gas, emergency equipment (e.g. emergency lighting, extinguishers, hose reels) are provided, serviced and maintained; and
- Ensure that Workers (other than staff) who are required to undertake work in a restricted area such as a Laboratory seek approval from the Facility Manager or a Leader/Supervisor prior to the work commencing.

Workers

- Follow the requirements of SWMSs and SOPs that have been implemented and report circumstances where Laboratory work poses hazards that need to be addressed;
- Report injuries, incidents and near-misses to the Leader/Supervisor or Facility Manager;
- Follow any reasonable direction issued by the appropriate persons, with regard to safety; and
- Seek the review of a direction relating to safety and the direction may, on request, be reviewed by the Head of School or the administrative unit in consultation with the Health and Safety Team. The direction is presumed to be reasonable and is to be followed unless it is reviewed and an alternative direction is confirmed.

7. References & Related Documents

The following documentation is referenced in, or applicable to this Guideline:

HSG 1.2 Roles and Responsibilities

HSG 3.1 Health and Safety Risk Management

HSG 4.2 Health, Safety and Wellbeing Induction, Training and Competency

KRA 1.1 Chemical Management

KRA 1.2 Biological Management

KRA 1.4 Plant and Equipment

KRA 1.5 PPE and Protective Clothing

KRA 1.6 Noise Management

KRA 1.8 Gene Technology

KRA 1.9 Radiation Management

KRA 2.1 Manual Handling and Ergonomics

KRA 2.4 Working Alone or in Isolated Situations

KRA 3.6 Electrical Safety and Isolation

KRA 3.7 Electrical Testing and Tagging

University of Newcastle Decommissioning Laboratory and Associated Facilities Procedure

Welcome to the Australian & New Zealand Council for the Care of Animals in Research and Teaching (ANZCCART)

Work Health Safety Act 2011 and Work Health and Safety Regulation 2017

Animal Research Act 1985 No 123 NSW Legislation and Animal Research Regulation 2021

Poisons and Therapeutic Goods Regulation 2008

Protection from Harmful Radiation Regulation 2013

Commonwealth Gene Technology Act 2000 and Regulations 2001

Security Sensitive Biological Agents (SSBA) Regulatory Scheme

Pregnancy SafeWork NSW

Department of Agriculture Fisheries and Forestry

Australian Standards AS/NZS 2243 Safety in Laboratories series, Parts 1 and 3

Australian Immunisation Handbook

Animal Hazards Procedure – University of Newcastle

Animal Workers Questionnaire – Laboratory Animal Allergy (LAA)

8. Amendment History

Version	Date of Issue	Approval	Section(s) Modified	Details of Amendment
1	October 2024	Chief People and Culture	-	Original version. Develop in consultation with Deborah Edmunds, Louise Rabbitt, Amanda Hill, IBC members, WHS teams and wider university employees.

9. Appendices

Appendix A – Examples of zoonoses associated with common species

Pigs Erysipeloid Ringworm Salmonella Ascarid allergy Sarcoptes Encephalomyocarditis virus (potential) Streptococcus suis Cryptosporidia Balantidium coli Yersinia Swine flu **Sheep** Q fever Salmonella Anthrax Orf Dermatophilus Brucellosis **Cats** Toxoplasmosis (from cat faeces) Cat scratch fever Ringworm Toxocara cati, Toxascaris leonina (from cat faeces) Chlamydia psittaci Bites due to oral anaerobic bacteria, pasteurella & others Sporothrix schenckii Mites	**Cattle** Leptospirosis Q fever Ringworm Pseudocowpox (orf, milker's nodule, papular stomatitis) Ascarid allergy Cryptosporidia Brucellosis CJD **Birds (including poultry)** Chlamydia psittaci (especially parrots) Salmonella Mites Bird flu **Rodents and rabbits** Salmonella Lymphocytic choriomeningitis virus (note: never demonstrated in Australia, but believed to be here) Ringworm Q fever Parainfluenza virus (sendai virus) Pseudotuberculosis Leptospirosis (Weil's disease) Giardia Encephalomyocarditis virus Cryptosporidia Sodokosis Hantavirus (Korean Haemorrhagic fever)