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All work in UNSW Animal facilities and UNSW Physical Containment facilities must follow the Australian Standard AS/NZS 2243 series for minimum best practice as well as any legislated requirements.

The risk of exposure to tetanus for workers in an animal facility, working with all types of animals, must be considered in any risk assessment.

Certain types of wounds are likely to favour the growth of tetanus organisms. These wounds may be the result of an animal bite or scratch, but could also be pre-existing, non-work related, wounds, and could include:

- compound fractures;
- bites, scratches, or deep penetrating wounds, (See Appendix 2)
- wounds containing foreign bodies (especially wood splinters)
- wounds complicated by purulent (pus-containing) infections
- wounds with extensive tissue damage (e.g., contusions or burns); or
- any superficial wound obviously contaminated with soil, dust, or manure (especially horse manure)
- wounds where topical disinfection is delayed more than 4 hours.

In previously vaccinated people, the administration of more than 1 dose of a tetanus-containing vaccine in a 5-year period may provoke adverse events. Adults who have sustained injuries deemed to be tetanus-prone should receive a tetanus booster dose if more than 5 years have elapsed since the last dose.

# Hazard Type/ Risk of Injury or Illness

### . Allergens

- · Particularly animal proteins, urine, and serum
- Hair/fur/dander
- Mould spores
- 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)

#### i. Hazardous manual tasks

- Lifting, carrying, pushing, pulling and related activities
- Handling of animals, goods (e.g., feed and bedding) and equipment such as compressed gas cylinders

## **Possible Risk Controls**

- Increasing ventilation can reduce allergen exposure four-fold
- Air filtering
- Screen food supplies for mites
- High quality/low dust bedding and feed documented
- Physical barriers to reduce exposure
- Safe Work Procedures (SWPs)
- 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
- Personal Protective Clothing and Equipment (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
- Modify object, size, weight if possible (eg order in smaller animals or smaller bags of feed/bedding)
- Mechanically restrain large animals
- Modify actions, movements

- 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,

| <ul> <li>Hazard and incident reporting, investigation,<br/>and corrective action response</li> </ul> |
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The most significant hazards to mother and unborn child are:

Physical changes associated with late pregnancy make the pregnant woman more susceptible to injury from hazardous manual tasks.

- The key zoonotic disease during pregnancy is toxoplasmosis (e.g., from cats) however protozonal diseases may also be a risk for pregnant or immunocompromised people.
- Listeriosis (from certain types of food) is a significant risk during pregnancy.
- Intrauterine infection may lead to congenital abnormality or death of the foetus. Fastidious personal hygiene is required to minimise risk of infection.
- Medical advice should be sought before receiving any vaccination.

Refer also to the WHS Act 2011 Part 3, Section 35, and WHS Regulations 2017 Part 11.3, Clause 699 for the full description of Incident Notification requirements

<u>Australian and New Zealand Council for the Care of Animals in Research & Teaching</u> ANZCCART): website and fact sheets

University of Queensland: Guideline for animal containment facilities (2010)

Work Health and Safety Act 2011 and Work Health and Safety Regulation 2017 | SafeWork NSW

Animal Research Act 1985 No 123 - NSW Legislation and Animal Research Regulation 2021 (nsw.gov.au)

Poisons and Therapeutic Goods Regulation 2008 - NSW Legislation

Radiation Control Regulation 2013 - NSW Legislation

Commonwealth Gene Technology Act 2000 and Regulations 2001

Department of Health and Aging - (National Security legislation) SSBA

WorkCover Pregnancy and Work guide Pregnancy | SafeWork NSW

Department of Agriculture:

Assorted cryptosporidia

Pasteurella

Bites e.g. rat bite fevers, mixed aerobic/anaerobic infections

Hydatidosis

Ringworm

Leptospirosis (Weil's disease)

Toxocara canis Ascarid allergy

Rabies (if travelling overseas)

Mites, assorted

Hendra virus Lyssa virus

In some countries may be a reservoir for Ebola

Herpes virus simiae (B virus)

Hepatitis A, B, C, D, E

HIV Yaba virus

Cytomegalovirus Poliomyelitis virus

Tuberculosis (M. tuberculosis)

Shigella Salmonella Giardia

Balantidium coli

Entamoeba histolytica

Sarcoptes

Irrespective of where the animal was sourced, any bite or scratch from an animal needs immediate attention. Rat bites in particular need closer attention.

Refer to paragraph 5.2 for the requirements for reporting such incidents.