Laboratory Animal Allergy (LAA) Information Sheet

Persons who come into contact with laboratory animals may develop Laboratory Animal Allergy (LAA). Allergic reactions are more likely after substantial or repeated exposure to the allergen—either to the animal itself or to items contaminated with the excretions and secretions of animals including urine, saliva, dander, fur/hair, and serum. LAA may lead to serious allergic reactions, including occupational asthma, if exposure to the allergens continues. Up to 30% of people exposed to laboratory animals may be affected if appropriate risk controls are not in place. Fortunately LAA can be managed if identified early so that appropriate precautions can be put in place to allow affected persons to continue safely with their work. It is important that personnel working with animals read and understand this document and report any symptoms as early as possible. Early detection allows management of the condition to minimise the chance of progression to severe symptoms.

Symptoms of LAA

- Rhinitis (itching/running nose, sneezing)
- Conjunctivitis (itchy, red, watery eyes)
- Skin Rashes (including urticaria (pink raised rash) and wheals on the skin around bites and scratches)
- Shortness of breath, coughing and wheezing

These symptoms may appear alone or in combination and may occur any time.

Risk factors

The most important risk factor is level of exposure to the allergen.

Persons with pre-existing allergies or asthma may be more at risk of developing LAA or of exacerbation of their pre-existing allergies or asthma.

Smokers may be more at risk of developing LAA.

Exposure to Allergens

Animal allergens are generally proteins contained in saliva, urine, hair/fur, shed skin (dander) or serum and exposure may occur through:

- Skin contact with urine, saliva, fur, serum, dander or tissues.
- Inhalation of airborne allergen.
- Inoculation after skin penetration by bites, scratches or sharp instruments.

Prevention

The risk of developing LAA can be reduced by minimising exposure to laboratory animal allergens. It is essential that personnel working within animal facilities wear personal protective equipment and adhere to procedures for animal and cage handling. Procedures will vary with the type of animal facility and caging and may include:

- Wearing long sleeved closed front gowns cover shoes and gloves during activities involving animals. (Personal Protective Equipment -PPE)
- Wearing, in addition to normal PPE, correctly fitted P2 mask and safety goggles during high exposure activities
- Removal of PPE before leaving animal handling areas to prevent spread of allergens outside animal areas.
- Using individually ventilated caging and handling animals and associated equipment under biohazard hoods.
- Local extract ventilation for high exposure activities.
- Working in well ventilated areas
- Segregating areas where airborne allergy loads are highest (eg cleaning rooms and cage dump areas)
Reporting Symptoms

Early detection is important to the management of this condition. All personnel working with animals must regularly complete the LAA questionnaire:

- New Staff will be asked to complete the questionnaire at 0, 3, and 6 months and then annually thereafter.
- Ongoing staff will be asked to complete the assessment annually

In addition personnel should report any LAA symptoms immediately via UWA Incident Report. UWA Safety, Health and Wellbeing can provide valuable assistance and guidance in managing LAA and minimising the impact of this condition on the affected individual.

More information

More detailed information can be found in the within the animal handling safety and health procedures. 