



Bio CoP001- Code of Practice for management of animal allergens (AAs)

Section 1 Introduction

Animal Allergens in the workplace are commonly (but not exclusively) associated with mice and rats in animal facilities and laboratory settings and these are known as laboratory animal allergens (LAA). Within the University exposure to animal danders, urine (or other bodily fluids) or dust in animal bedding or feeding may occur in a laboratory setting, but also within a veterinary or farm setting.

Animal Allergens (AA) are classed as a respiratory sensitiser¹ under the Control of Substances Hazardous to Health regulations 2002 (COSHH).

It is known that 15 to 20% of individuals with no history of allergic conditions will develop an allergic reaction related to their work with laboratory animals if no controls are applied. Atopic individuals (people who already have an allergy) have four times greater risk.

Unlike many other respiratory sensitisers, they do not have a Workplace Exposure Limit (WEL), as the health effects due to exposure vary significantly from person to person.

1.1 Health effects and exposure routes

1.1.1 Potential health effect of exposure

- attacks of wheezing, coughing, chest tightness or shortness of breath. Associated conditions are;
- rhinitis (sneezing/runny nose) and/or
- conjunctivitis (itchy and inflamed red eyes)
- dermatitis (itchy and or inflamed skin)

The symptoms can develop immediately after exposure, can appear several hours after exposure, possibly at night, and for some it can be a period of time after repeated exposure and so any link with workplace activities may not be obvious.

If exposure is not controlled or limited, this can, for some, lead to Occupational Asthma or Occupational Dermatitis, reportable diseases under the Reporting of Incident, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR).

¹ Further information on sensitisers in general can be found at <https://www.ed.ac.uk/health-safety/guidance/hazardous-substances/sensitisers>



1.1.2 Exposure routes

Dander dust proteins from animals can become airborne and can land on skin or mucous membranes (mouth and eyes) as well as being inhaled. The allergens can be released from movement of the animal or the material and bedding used to house the animal.

The airborne material can easily move between areas and therefore may be present in surrounding areas.

Higher risk activities include, but are not limited to, the following settings and precautions must be used to protect from exposure:

- cleaning of cages/emptying of cages/changing cages/cleaning animal rooms with animals in situ
- feeding animals when the lid of the cage is removed
- handling of any kind of animals/tissue, animal cages, animal bedding or animal feed
- shaving for surgery
- transport of animals

Sensitised individuals may also be able to feel the effects in areas which are generally not considered to be risk areas, such as changing rooms or animal facility corridors, and extra precautions must be used by these individuals at appropriate times.

Section 2 Organisation and management responsibilities

2.1 School/Deanery

2.1.1 Head of School/Deanery

The Head of School/Deanery is responsible for the health and safety of the staff and students in their area (University H&S Policy and Framework). They must ensure that suitable arrangements are in place to implement this Code of Practice and that there is suitable monitoring arrangements to advise them that appropriate control measures are in place to reduce the risk to staff and students.

The Head of School is required to ensure there is a process in place to authorise PI/Supervisor's records in the COSHH Health Passport System (CHPS) as an administrative function, as required by the system (more information on the CHPS is below). They may delegate this task to School staff, for example School Safety Adviser, but we recommend this decision is recorded at a local safety committee, or similar.



2.1.2 School/Deanery Management

School/Deanery management within each area will appoint management roles to key staff such as Senior Managers/Senior Technical staff, Lab Managers, farm or animal clinical staff and local Safety Managers (referred to under section 2.1.3 PI/Supervisor below).

The University aims to have all animal work undertaken within specific areas such as BVS facilities, designated laboratories or veterinary facilities. Laboratory work can be undertaken out with a BVS facility with appropriate management and controls in place, with identified lead staff to ensure the areas are managed to a high standard. The specified roles must be defined across each area and include the following:

- check that each Research Group has risk assessed their tasks, with appropriate control measures identified
- ensure practical and appropriate onsite inductions with Researchers or other staff are available
- appropriate PPE/RPE is made available as required, including training, use, maintenance and storage space
- managing access including restricting access, if required, for example, if following Health Surveillance (HS), a person may require extra control measures to safely access

2.1.3 PI/Supervisor

It is the responsibility of the PI/Supervisor (henceforth, the title of 'Supervisor' includes any managerial position for the purposes of this CoP) to ensure the health and safety of researchers or other staff under their supervision.

- ensure that suitable and sufficient risk assessments (RA) are in place to control the risk from animal or laboratory animal allergens
- ensure all of the Research Group are aware of the outcome of this RA
- undertake required University and School training on risks associated with animal allergens
- ensure all in their Research Group undertake required University and School training in risks associated with animal allergens
- identify new Researchers and ensure that they are identified to the Occupational Health Service for HS prior to any possible exposure to animal allergens, that they attend their health surveillance appointment and that any outcomes of that HS are implemented
- identify new Researchers and ensure that they are identified to Occupational Hygiene for facefit testing if RPE is a requirement of the risk assessment and routinely check RPE maintenance records
- access University COSHH Health Passport System and follow process for authorising Researchers, ensuring HS is up to date, adding possible exposures, and actioning any advice following HS for Researchers



- Supervise Researchers and record on the job training in techniques for both early career staff and new students. This includes ensuring that Researchers understand all relevant control measures. This means ensuring, either directly or through recognised arrangement, they are following practices and implementing control measures

2.1.4 Researchers (staff or students)

Researchers (any other staff or students) who access the animal facilities or undertake animal procedures out with animal facilities managed by the School are the responsibility of their PI/Supervisor. The title of 'Researcher' includes all staff who may be exposed to animal allergens in the workplace for the purposes of this CoP unless otherwise specified.

Researchers have specific responsibilities as follows:

- read and understand the outcome of the risk assessment and any associated School protocols for the work (RA)
- undertake required animal allergen online training on LEARN (currently 3 courses) as well as any local course requirements
- register on CHPS system and follow process for requesting access to facilities required
- use the specified engineering controls, as required, on each occasion as part of their procedure
- wear required personal protective equipment (PPE) including respiratory protective equipment (RPE)
 - arrange and attend facefit testing (if required) and maintain RPE as directed
- attend health surveillance appointments (staff only) (if required) and action any advice in conjunction with PI and BVS staff (if applicable)
- report to PI/Supervisor any symptoms of sensitivity or allergy if suspected to be related to animal work as soon as possible
- follow all other safety protocols provided

2.1.5 School Safety Adviser/Manager

School Safety Advisers/Managers have the same core responsibilities as set out in the H&S Policy and Framework but may have additional responsibilities within their areas, but listed are the minimum:

- provide advice to PI/Supervisor/Researcher on risk assessment process and best available control measures
- be aware of relevant regulations and guidance (HSE and UoE) regarding animal allergens and reviews to these on an ongoing basis



- ensure that a suitable audit system is in place to be used to monitor the implementation of the Code of Practice and provide a review to the Head of School/Deanery at suitable intervals
- provide local training as required following local risk assessment
- oversee CHPS system for School in an oversight capacity to ensure training/HS/facefit testing etc. has been undertaken by Researcher (liaising with Researcher and PI if any concerns)
- raise any concerns and act as a link between Health and Safety Department/BVS Health and Safety and Research Groups
- assist in the investigation of any suspected or confirmed cases of sensitisation/occupation asthma

2.2 BVS Facility

2.2.1 Head of BVS

The Head of BVS has the responsibility for the health and safety for all staff within BVS as well as ensuring overseeing all BVS facilities. This includes ensuring that all health and safety standards are consistent over all BVS facilities.

2.2.2 BVS Facility Managers

It is the responsibility of the Facility Managers to ensure that the outcomes of risk assessment for all work under the clear responsibility of the BVS animal husbandry staff are implemented. They will also ensure that any new PI working within the area has undertaken and submitted their RA for work in the unit.

Their responsibilities include:

- use the CHPS system to accept requests for animal facility access and only undertake induction process if a full record is in CHPS for the Researcher
- arrange onsite inductions with all Researchers
- arrange card access to BVS facility
- provide storage space for Researchers' RPE (if required)
- undertake required training on LEARN (3 courses)
- wear required PPE (including RPE)
- routinely check RPE records of facility staff
- attend HS (if required)

BVS Facility Managers who also supervise staff also have the responsibilities for their staff listed in section 1.2.6 PI/Supervisors for their staff.



2.2.3 BVS facility staff

BVS staff members who work within BVS facilities are the responsibility of the Facility Management.

Animal facility staff have specific responsibilities as follows:

- read and understand risk assessment (RA)
- undertake required animal allergens training on LEARN
- access COSHH Health Passport System (CHPS) , see section below, and follow process for access to animal facilities
- wear required personal protective equipment (PPE) including respiratory protective equipment (RPE)
 - arrange and attend facefit testing (if required) and maintain RPE (including keeping records)
- attend HS (if required) and action any advice
- follow all applicable safety protocols and undertake any other BVS mandatory training

2.2.4 BVS Health and Safety

The BVS Health and Safety Officer has the following responsibilities, in addition to the School Safety Adviser/Manager responsibilities listed at 2.1.5:

- undertake audits of facilities to ensure Facility Staff/Researchers are using appropriate control measures or RPE if required
- work with Occupational Hygiene Unit on controls for LAA exposure, including the routine monitoring of LAAs
- Assist BVS Facility Managers with their LAA risk assessments

2.3 Estates Department

2.3.1 Director of Estates

The Director of Estates is responsible for the health and safety arrangements for all Estates staff who may require to access these areas, arrangements include suitable control measures to minimise the risks of exposure to AA.

2.3.2 Estates cleaning and maintenance staff

The Estates Department will ensure that all Estates maintenance and cleaning staff are provided with sufficient information, instruction and training with regard to animal allergens, using the appropriate control measures for the tasks undertaken, as well as ensuring Estates staff attend all mandatory training courses and all health surveillance appointments.



Estates maintenance and cleaning staff have a responsibility to attend all, and comply with, health surveillance appointments and advice, undertake the required training and follow all control measures and follow any local induction processes.

2.3.3 Estates Health and Safety Team

Support Managers in the Estates Department with the undertaking of appropriate risk assessments, the development and maintenance of safe systems of work, the organisation of training and the provision of appropriate personal protective equipment (PPE), including respiratory protective equipment.

2.4 Visitors to areas with potential for exposure to animal allergens

2.4.1 BVS facilities

Must, preferably in advance of attending site but definitely prior to access being granted, complete the BVS Visitors Form (BVS0133) and be informed of laboratory AA risks prior to entering the facility or rooms in which animal procedures are being undertaken. Access will be given for a set time period required to complete their visit or task. Any personal protective equipment will be supplied on entry and visitors are expected to use this as directed. Access may be denied by the Facility Manager if entrance requirements are not met.

2.4.2 Non BVS facilities

Follow all safety procedures as indicated by the area they are visiting. Ensure prior liaison with management of areas visiting.

2.4.3 Non-Estates cleaning and maintenance staff

Some of our laboratory areas are maintained or cleaned by outside contractors or other private firms. They must have in place suitable and sufficient risk assessments and controls for their own staff for access and working within these areas. They must liaise with local management to arrange access and follow any local safety procedures as outlined above.

2.5 Corporate Health and Safety Department

2.5.1 BioSafety Unit

- University Biological Safety Adviser responsible as the competent adviser on biological substances
- Manage the policy, code of practice and guidance on animal allergens, ensuring these documents are revised and updated as required
- Support Schools during any cases of sensitisation or occupational asthma diagnoses, leading any investigations as required



2.5.2 Occupational Health Service

- Manage the provision of an appropriate health surveillance programme
- Issue Fit Notes to named local staff member in a timely manner
- Provide advice and guidance following HS on managing/limiting exposure (if required)

2.5.3 Occupational Hygiene Unit

- Provide the University's CHPS system, ensuring it is maintained and updated as required
- Provide advice and guidance on RPE, and provide a Facefit testing service
- Arrange monitoring of AA exposure

2.6 Risk assessment

A COSHH risk assessment must be undertaken to assess the risks of the possible exposure to animal allergens. This can be incorporated into other risk assessments for a process, or be a standalone risk assessment, depending upon the circumstances. Guidance on COSHH and COSHH risk assessments for biological agents can be found at <https://www.ed.ac.uk/health-safety/biosafety/policy/guidance/biological-agents> with specific guidance on animal allergens also available.

2.6.1 Control measures

The Health and Safety Executive have produced a guidance document, HSG76, available at <http://www.hse.gov.uk/pubns/eh76.pdf>, which outlines what control measures are typically required or should be taken into account when risk assessing the possible exposure to laboratory animal allergens. This Code of Practice is based upon that document but PI's/Supervisors should also ensure they take that Guidance document into account when looking at their risk assessments and control measures.

A guidance document on control measures is also available at http://www.docs.csg.ed.ac.uk/Safety/bio/guidance/containment_controls/guidance_cop_animal_allergens.pdf

2.7 Training and Supervision

2.7.1 Training

All staff who are required to work with animal allergens must complete the following three courses, which are available on LEARN, which can be accessed at <https://www.ed.ac.uk/health-safety/training/e-learning/learn-courses/laa-training-courses>:

- Health and Safety Awareness for PIs/Supervisors



- Occupational Health and laboratory animal allergens
- Respiratory Protective Equipment

There may also be other local training courses required, for example spill management, waste management, lone working, animal handling, manual handling – these should be detailed on the risk assessment.

More extensive training on RPE (reusable and powered hoods) is also available on LEARN, see <https://www.ed.ac.uk/health-safety/training/e-learning/learn-courses/tight-fitting-rpe> and <https://www.ed.ac.uk/health-safety/training/e-learning/learn-courses/powered-hood>).

2.7.2 Supervision

PI/Supervisors must monitor their staff and students for compliance in the use of control measures, meeting training requirements and attendance at health surveillance appointments as per section 2.1.3 PI/Supervisor.

The level of supervision must also be appropriate, based on the competence level of the staff or student.

2.8 Health Surveillance and COSHH Health Record

2.8.1 Health surveillance

EH40, which details Workplace Exposure Limits, outlines that health surveillance is appropriate for all exposures or possible exposures to substances which can cause occupational asthma (paragraph 55). This should be reflected in risk assessment. Staff must attend all health surveillance appointments. PIs/Supervisors must implement all outcomes from health surveillance as soon as practicable after the Fit Note information is received.

Full details on the health surveillance process can be found online at <https://www.edweb.ed.ac.uk/health-safety/occupational-health/managers/health-surveillance>.

2.8.2 Individual COSHH Health Record

All staff are required to have a COSHH health record if there is a possibility they may be exposed to any material or substance which could lead to ill health or requires health surveillance, including a sensitising agent. We have also extended this process to include students.

A COSHH Health Record is not the same as an Occupational Health Record. The COSHH Health Record gathers data on possible exposures at work, the control measures implemented to reduce or eliminate the possible exposure, as well as the outcomes of any health surveillance.



The University has introduced an online system, called the COSHH Health Passport System (CHPS), which collates and holds information of staff who may be exposed to hazardous substances, in particular animal allergens, to ensure that their Supervisor or Manager is aware of what materials someone has worked with, and if they have undertaken the appropriate training, health surveillance and facefit testing. It is also used to manage access to any animal facility managed by BVS.

Full details on what is required in a COSHH Health Record and how to use this system is at <https://www.ed.ac.uk/health-safety/online-resources/online-tools/health-passport>.

3.0 Summary of key requirements

Role	Responsibility
Head of School/Deanery	ensure named staff are appointed to manage animal procedure rooms outwith BVS facilities
	ensure suitable monitoring of management is in place, in particular of procedure rooms out with animal facilities
	ensure onsite inductions with Researchers are available
	Ensure provision of suitable storage space for Researchers RPE (if required)
Deanery Management	support PI and Research Groups in fulfilling all pertinent tasks
	access CHPS system to authorise PIs (simply to ensure a line of authorisation which system requires)
PI/Supervisor (includes BVS staff who are supervisors)	undertake or arrange for RA to be done
	ensure all Research Group are aware of RA
	undertake mandatory training on LEARN (3 courses) as well as any other local training requirements



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	identify new Researchers and ensure they are identified to Occupational Health Service for HS
	identify new Researchers and ensure they are identified to Occupational Hygiene Unit for facefit testing
	access CHPS system and follow process for authorising Researchers, ensuring HS is up to date and adding possible exposures, action any advice following HS for Researchers
	supervise researchers as appropriate
ensure all Research Group members:	follow safety protocols
	attend HS
	attend facefit testing and ensure maintenance records are kept up to date
	Undertake all pertinent training
	use CHPS
Researchers	Follow all applicable safety protocols including using control measures as per risk assessments
	Attend health surveillance appointments and reporting symptoms to supervisor in a timely manner
	Undertake mandatory training
	Arrange and attend facefit testing appointment, if required, and ensure maintenance and record keeping of RPE
	Use CHPS
Head of BVS	Oversee health and safety of all BVS facilities



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	ensure sufficient engineering control measures (such as downdraught tables) are available in animal facilities
BVS Facility Managers	access CHPS system to accept requests for animal facility and subsequently to ensure that Researchers have appropriate HS for access
	arrange onsite inductions with Researchers
	arrange access to facility
	provide storage space for Researchers RPE (if required)
	manage own staff exposures
	undertake mandatory training on LEARN (3 courses)
	wear required PPE (including RPE) and ensure maintenance records are up to date
	attend HS (if required)
BVS Health and Safety Officer – as School Safety Adviser/Manager but also including	Audits of BVS facilities
	Manage LAA monitoring
	Assist BVS staff with LAA risk assessments
School Safety Adviser/Manager	assist School with risk assessments and audit systems
	provide local training (if applicable)
	oversee CHPS system for area to ensure training/HS/facefit testing etc. has been undertaken by Researcher (liaising with Researcher and PI if any concerns)



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	link between Health and Safety and Research Groups
Director of Estates/Senior Estates staff	ensure control of animal allergens taking into account during design process of refurbishments or new builds
Estates Project Managers	ensure all available guidance is followed and controls are designed in for refurbishments or new builds
Estates staff	follow all protocols or procedures as required
Estates Health and Safety Team	assist Estates line managers with controlling exposure
Visitors	follow local entry requirements

Document version

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V1.0	Original	11/11/2020 BSU
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