



UNIVERSITY OF
BIRMINGHAM

Health and Safety Policy **Biological Safety**

UHSP/9/BS/14

This document sets out in more detail the arrangements for compliance with University Health and Safety Policy at College level and it gives guidance on how these requirements may be met. This document forms a part of the University Health and Safety Policy.

Biological Safety

Aims of the policy

The aim of this policy is to prevent, or where that is not possible to minimise, risks to human health and to the environment arising from activities involving *biological materials* and to set appropriate standards for control of those risks.

The University has arrangements for oversight of this policy. Responsibility for implementation of this policy within Colleges lies with the Head of College. Supervisors, as persons directing work, have a critical role in ensuring that work with biological materials is carried out safely. Individuals also have a duty to themselves and others to work safely.

Compliance with this policy, and its associated Codes of Practice, will ensure compliance with the relevant statutory requirements in particular *The Control of Substances Hazardous to Health Regulations* and *The Genetically Modified Organisms (Contained Use) Regulations*.[#]

Scope of the Policy

This policy applies to the deliberate handling, use, transport and storage of *biological materials including organisms that have been genetically modified**, which are defined as:

any micro-organism, cell culture, parasite, human or animal tissues (including blood, urine and other body products) or plant materials, which may cause infection, allergy, toxicity or other risks to human health or cause a risk to the environment.

* This includes both work to produce or construct genetically modified organisms and work with organisms already modified.

NOTE: Any work involving the deliberate release of GMOs into the environment is subject to further regulation and the Health and Safety Unit must be consulted at the earliest stage of planning.

Exceptions to the Policy

This policy does not apply to incidental handling of bloods and human body fluids in the course of first aid treatment.

POLICY

Heads of Budget Centres must make arrangements in areas under their control to ensure:

Assessment and Approval

- Risk assessments are carried out **in advance** of work commencing;
- Risk assessments are reviewed whenever there are significant changes to the work and at least annually to ensure that they remain relevant and sufficient;
- Proposals to work with infectious materials, to construct or use genetically modified organisms or to work with animal or plant pathogens that require a DEFRA licence are scrutinised and approved by the appropriate peer group **before** work commences, in accordance with the arrangements set out in *Guidance Note 1: Approval of work and arrangements for notification*;
- Staff are aware of the requirement to notify certain types of work to the enforcing authorities and pay the accompanying fee, where appropriate;

Information, Instruction, Training and Competence

- Persons working with biological materials are competent to do so without undue risks to themselves, others or the environment;
- Persons who may be at risk or have duties under this policy are provided with information, instruction and training, where appropriate;
- Records are kept of the training received by those persons working at higher containment levels (ACDP/ACGM levels 2 and above);

Measures to Control the Risk

- Appropriate measures are provided to ensure that risks arising from activities involving biological materials are eliminated or adequately controlled;
- Equipment and facilities are maintained and tested to ensure efficient and safe operation;
- Persons working with agents in Hazard Group 3 are notified to the Health and Safety Unit and the Occupational Health Unit;
- Where appropriate, health surveillance is provided in agreement with the Occupational Health Unit and Health and Safety Unit;
- For work with higher risk pathogens (Hazard Group 3), an emergency plan is prepared to deal with the unintentional release of the agent;
- Biohazard signs are displayed in accordance with current guidance;
- Persons at increased risk, such as expectant or nursing mothers, immuno-compromised individuals, or persons with existing respiratory or skin problems are made aware of the increased risk to their health from work with certain agents, and this risk is assessed;

Transport

- Appropriate safety measures are taken to ensure containment during any transportation of biological agents/materials on- or off-site, and to deal with any emergency;
- Current packaging and labelling requirements are complied with;

Storage

- Hazardous biological materials are adequately identified and stored safely and securely;

Waste treatment and Disposal

- All infectious biological materials are autoclaved or treated using another validated waste treatment method to adequately reduce infectivity, and are disposed of safely;

Local Management Arrangements

- Local rules for biological safety are produced under the College Health and Safety Policy and made available to staff;
- Laboratories and designated areas clearly display appropriate signage;
- Local arrangements are in place for monitoring that the above requirements are being put into practice;
- A competent person(s) is appointed as Biological Safety Officer (BSO) to advise the Head of Budget Centre on biological safety;
- Records are kept of assessments, training, testing of equipment, persons working with Hazard Group 3 agents and any incidents or accidents involving biological materials;
- Local arrangements are in place for monitoring that the above requirements are being put into practice;

Emergencies

- Emergency procedures are in place for dealing with puncture wounds and splash incidents;
- Emergency arrangements are in place to deal with spillages or airborne releases of biological agents;
- All accidents involving release, or exposure to, a Hazard Group 2 or 3 biological agent or a Class 1, 2 or 3 genetically modified micro-organism are reported promptly to the Health and Safety Unit;

• ***Anti-terrorism measures***

- The Health and Safety Unit is notified of the acquisition of any of the pathogens or toxins listed in *Guidance Note 1: Approval of work and arrangements for notification (Schedule 5 agents)*.

Supervisors must:

- Ensure that work under their supervision has been assessed and approved by the appropriate group as specified in this document **before** work commences;
- Ensure that assessments of work under their control are reviewed where there are any significant changes, and at least annually, to ensure they remain suitable and sufficient;
- Ensure that appropriate control measures are used and procedures followed, and that persons whom they are supervising are aware of the risks and procedures in the event of accidents or incidents;
- provide appropriate supervision and monitor compliance with this policy and local rules;
- assess the competence of persons under their control to work safely and where appropriate arrange for any necessary training. An assessment of competence should be carried out on all persons new to the College and new to a type of work or category of risk;
- Report all accidents and incidents, particularly those involving a release of, or exposure to, a biological agent immediately

Individuals must:

- be conversant with the risk assessments that apply to their work;
- adopt safe practices in activities involving biological material, in particular to carry out the work in designated areas, to wear appropriate protective equipment and clothing and to dispose of waste in the specified manner;
- report any incidents, accidents or defects in equipment relating to the handling of biological materials.
- co-operate with their supervisors, Health and Safety Co-ordinator, Biological Safety Officer and any other person appointed to advise or monitor health and safety in the local safety arrangements for biological safety;

The Assistant Director, HR (Workplace Wellbeing) must make arrangements to ensure that:

- Notifications for work with Class 2 and 3 Genetically Modified Micro-Organisms, and GM Organisms defined as requiring notification under the Contained Use Regulations, are submitted to the Health and Safety Executive,
- Notifications for work with those Hazard Group 2 and 3 agents listed in University Guidance Note 1 are submitted to the Health and Safety Executive,
- Notifications for the acquisition or use of those pathogens and toxins listed in Guidance Note 1 are submitted to the Home Office,
- Health surveillance and immunisation is provided where necessary,
- Health records are kept of those persons working with biological agents in Hazard Group 3 for 40 years,
- Accidents involving release of, or exposure to, a biological agent are reported to the Health and Safety Executive, as required under the *Control of Substances Hazardous to Health Regulations and the Genetically Modified Organisms (Contained Use) Regulations*.

FURTHER SOURCES OF INFORMATION

UNIVERSITY GUIDANCE NOTES: Health and Safety Unit website:

<https://intranet.birmingham.ac.uk/hr/wellbeing/worksafe/biological/index.aspx>

General guidance from the Advisory Committee on Dangerous Pathogens (ACDP)

The Approved list of Biological Agents. <http://www.hse.gov.uk/pubns/misc208.pdf>

Biological agents: Managing the risks in laboratories and healthcare premises (ACDP 2005) –
<http://www.hse.gov.uk/biosafety/biologagents.pdf>

The Management, design and operation of microbiological containment laboratories (ACDP 2001) -
Free download at <http://www.hse.gov.uk/pubns/books/microbio-cont.htm>

Specific ACDP/SACGM and other sector guidance

Protection against Blood Borne infection in the workplace: HIV and Hepatitis:
<http://www.hse.gov.uk/biosafety/diseases/bbv.pdf> (ACDP)

Transmissible Spongiform Encephalopathy agents: Safe Working and the Prevention of Infection
http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/Publichealth/Communicablediseases/CJD/CJDgeneralinformation/DH_4031067

Minimise transmission risk of CJD and vCJD in the healthcare setting
<https://www.gov.uk/government/publications/guidance-from-the-acdp-tse-risk-management-subgroup-formerly-tse-working-group>

Working safely with research animals: Management of infection (ACDP 1997) – Free download at
<http://www.hse.gov.uk/pubns/books/animal-research.htm>

The large scale contained use of biological agents (ACDP 1998) – Free download at
<http://books.hse.gov.uk/hse/public/saleproduct.jsf?catalogueCode=9780717615445>

HM 07-01 Safe management of healthcare waste (Department of Health 2006) -
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/167976/HTM_07-01_Final.pdf

Safe working and the prevention of infection in clinical laboratories and similar facilities (HSAC 2003) –
Free download at <http://books.hse.gov.uk/hse/public/saleproduct.jsf?catalogueCode=9780717625130>

SACGM Compendium of Guidance - <http://www.hse.gov.uk/biosafety/gmo/acgm/acgmcomp/>