



## Health and Safety Policy

# Blood Taking from Volunteers for Research

**UHSP/22/BTVR/14**

This document sets out in more detail the arrangements for compliance with University Health and Safety Policy at Budget Centre level and it gives guidance on how these requirements may be met. This document forms a part of the University Health and Safety Policy. It has been approved by the Joint Safety Advisory Committee, and it will be subject to review.

This Policy is intended to ensure safe ethical practice when taking blood from human subjects for research purposes.

**Please note** that the records required by this Policy will contain personal data. Members of staff and students who are processing personal data must ensure that they comply with the University's Data Protection Policy. It is important that they complete the online registration form to ensure that the University's registration with the Information Commissioner's Office is up-to-date and covers their processing.

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## INTRODUCTION

All human material should be treated as potentially infectious and be handled at containment level 2 unless a higher degree of containment is indicated by the risk assessment. The main hazards to consider when taking blood from human subjects are the blood borne viruses, notably Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV) and Hepatitis C virus (HCV). **Laboratory workers should also be aware that they must not under any circumstances use their own blood as a source of cells for culturing.** This is because in vitro transformation or genetic modification could theoretically result in malignant disease or expression of an unusually pharmacologically active protein if they were accidentally inoculated into the donor. Human cells for culture should always be obtained from individuals having no connection with the work.

Blood may be taken from volunteer donors, for research purposes, provided that the informed consent of the donor is obtained. Potential donors should be encouraged to read the advice on blood donation given by the [National Blood Service](#) and be advised to decline to give blood if they fall within any of the categories for which blood donation is not permitted.

Informal blood donation must ALWAYS be voluntary and persons should not be placed under pressure to give samples. Individuals must always have the right to withdraw use of their cells/tissues at any stage after collection.

Ethical approval is required for any work involving the use and storage of human blood or tissue, and this must be obtained in advance via the appropriate local research ethics committee – see the [University's Guidance on Research Ethics](#).

This policy provides information on how to comply with the appropriate health and safety requirements once ethical approval has been given.

## POLICY

**Heads of Budget Centre must make arrangements to ensure that, in accordance with the requirements of this Policy:**

- persons who may take blood are aware of the requirements of this Policy;
- persons from whom blood is taken are aware of the requirements of this Policy;
- ethical approval for the work is sought and obtained before work begins;
- records are maintained of the date and volume of blood taken from each agreed donor;
- persons who take blood are properly trained and competent to do so without risk to themselves or the donor;
- blood taking is confined to a designated room;
- blood taking from persons suspected of having an infection caused by a hazard group 3 agent is done under appropriate medical surveillance and has prior approval of the Advisory Group on the Control of Biological Hazards.

### **The person taking blood must ensure that:**

- blood is taken only in accordance with the requirements of this Policy;
- they are trained and competent to take blood;
- ethical approval for the work is sought and obtained before work begins. See the [University's guidance on the ethical review of research](#).
- blood is taken in the designated room;
- they have discussed immunisation against the major infective risks with the University's Occupational Health Unit, where practicable;
- they are familiar with the University Sharps Injury procedure (Ref: University Biological Safety Guidance Note 9: Sharps Injuries and Splash Incidents)
- suitable protective clothing is worn;
- spilt blood is mopped up immediately and the area disinfected;
- needles are safely disposed of, and are not re-sheathed after use;
- the donor is eligible to give blood and has given consent;
- that they do not under any circumstances use their own blood as a source of cells for culturing.

### **Persons giving blood must ensure that:**

- they have read this policy and are eligible to give blood;
- they have read the appropriate information leaflets and know and understand why they are donating blood;
- they know what their blood will be used for, what will happen to the results and are fully aware they are giving informed consent.

## **REQUIREMENTS FOR BLOOD TAKING**

### **Donations – quantity and frequency**

- Individuals must only donate a maximum of 500mls in a 6 month period (this applies to both male and female donors), providing they have no health issues. In these circumstances further advice should be sought from the Occupational Health Unit. Individuals must be advised not to donate blood to the transfusion service whilst donating frequently to the University. The frequency of donations should be minimised and individuals should be closely monitored throughout.

### **Record Keeping and Donor Consent**

- Under the Human Tissue Act consent is the fundamental principle for lawful storage and use of human tissues, including blood. Local arrangements should be followed at all times. The researcher must approach the potential donor and provide an information sheet for the donor to read, absorb and keep. [Information on designing consent forms and participant information leaflets can be found on the University's website](#).

### **Training and competence.**

- The person taking blood must have obtained a certificate of competence by undertaking training at an appropriate venue. Training has been provided internally within the University by external training provider M&K, and could also be provided by local hospitals (e.g. the UHB Clinical Skills Centre). It is also essential to obtain guidance in advance from the University's insurance office (Ex 46111) on insurance cover for blood taking.

## Designated Place

- Blood must not be taken in areas where there are microbiological, chemical or radiation hazards, nor where the preparation and/or consumption of food and drink take place.
- A place designated for blood taking must be suitable for the purpose:
  - large enough to comfortably accommodate a person lying on the floor in the event of a donor fainting;
  - contain an impervious worktop and handwashing facilities; and
  - the floor must be easy to clean in the event of spillage.
- Blood must only be taken by properly trained and competent people, e.g. a medically qualified person or phlebotomist.
- Blood must not be taken from persons suspected of having an infection caused by a hazard group 3 agent unless this is done under appropriate medical surveillance and with the prior approval of the Advisory Group on the Control of Biological Hazards.
- Samples of blood should be collected with a first aider present, or known to be available, to assist in the event of a volunteer fainting.
- A record of all blood donations should be kept. The proforma included in this policy can be used for this purpose.

## GUIDANCE

### Protective Clothing

A clean coat (which must not be used as a laboratory coat) should be worn for blood taking. Gloves and, where appropriate, eye/face protection should also be used.

### Spills

In the event of a spill the area should be disinfected using Presept granules which should be applied directly to the spill and left in accordance with manufacturer's instructions. The granules should then be removed using a disposable scoop. The area of the spill should be cleaned with paper towels and ethanol, or a chlorine releasing disinfectant solution. All waste should be sent for incineration.

### Sharps and their disposal

Advice and guidance on the safe use of sharps can be found within the document, "[Health and Safety \(Sharp Instruments in Healthcare\) Regulations 2013: Guidance for Employers and Employees](#)". Although the guidance and regulations are aimed at healthcare facilities, they still contain useful information on reducing the risk from sharps.

All sharps must be placed in a secure, puncture-resistant sharps bin which is suitable for incineration. Sharps bins must never be overfilled and should be sent for disposal when two-thirds full. Needles should not be resheathed.



## **References:**

National Blood Service - <http://www.blood.co.uk/index.aspx>

University Guidance on Research Ethics - <https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Ethical-Review-of-Research.aspx>

University guidance on designing participant information leaflets and consent forms - <https://intranet.birmingham.ac.uk/finance/documents/public/GuidanceandConsentForm.pdf>

Guidance on safe sharps use - [Health and Safety \(Sharp Instruments in Healthcare\) Regulations 2013: Guidance for Employers and Employees](#)".