



Safety Note 66

Phlebotomy

This Safety Note summarises the minimum standards that should be adopted in any facility used for phlebotomy – taking blood from a human donor’s vein. See also UoR Safety Code of Practice 14 Part 1 on Biological Safety in Laboratories.

Introduction

Finger pricks are not regarded as phlebotomy.

Phlebotomy should only be undertaken within facilities designated as Phlebotomy Facilities. Every space designated as a phlebotomy facility should be carefully chosen and, if necessary, adapted, to ensure it is suitable; and it should be managed and maintained to ensure it remains suitable.

Research, teaching or other work involving phlebotomy should not be carried out unless the phlebotomy tasks are covered by a suitable and sufficient risk assessment (see Code of Practice 14, Section 12). This should include assessment of the risk arising from any needle-stick injury. A protocol on how to respond to needle-stick injury during the work should be developed in advance of any phlebotomy being undertaken. The protocol should be based on Occupational Health Service’s advice on needle-stick injury, available from the OH Manager.

Phlebotomy should not be carried out unless the work has ethical approval (see the University’s [Ethics Framework](#) and [Code of Good Practice in Research](#)). This may require specific local arrangements to comply with the Human Tissue Act.

Blood should only be taken by another trained individual following a defined procedure that includes the basic sampling procedure below, not by the donor themselves.

Facilities

Blood should be taken only in a quiet area set aside for this purpose. This could include first aid rooms, designated as Phlebotomy Facilities. Taking blood in places where there are microbiological, chemical or radiation hazards is prohibited and therefore laboratories not suitable. Blood should not be taken in areas where the preparation or consumption of food/drink is taking place.

Space requirements:

- The area used should have a floor, work surfaces and walls that are easily cleaned and disinfected. In practice, this means a hard floor, impervious benching/tables, and chairs that are upholstered with wipe-clean materials
- The area should have a clean surface with two chairs (one for the phlebotomist and the other for the subject) or a bench or alternative appropriate seating

- There should be a handwash sink with hot and cold running water, liquid soap and paper towels available
- Drinking water should be available
- Alcohol hand rub should also be available
- It should be possible to provide privacy for the subject, whether that is through use of a dedicated room, or the use of screens/curtains in a shared space
- The room should have adequate heating, ventilation and lighting and should be cleaned routinely
- A telephone should be available as a means of raising the alarm and obtaining assistance if the donor faints or becomes unwell
- There should be storage for the required consumables, for example needles, containers, wipes, plasters and gloves
- A stocked first aid box should be available
- A clinical waste bin and sharps bin should be present in the room
- Materials to clear up a spillage and to decontaminate the parts of the room affected should be available (see below and refer to SN36 - Cleaning Up Bodily Fluids)
- The protocol on how to respond to needle-stick injury should be available in plain sight within the facility

Sampling

In advance of phlebotomy commencing, both the donor and phlebotomist should be aware of the protocol detailing how to respond to needle-stick injury.

Subjects should be sitting down on a stable chair (i.e. not a laboratory or office swivel chair). Sufficient space should be present immediately adjacent to the subject, should they need to lie down or feel faint.

Where samples of greater than 20 ml are to be taken the donor should be lying down on a couch.

For samples greater than 50 ml, the sample must be collected in a clinical room, staffed by qualified physician, nurse or first aider and consideration should be given to additional first aid provisions.

Basic protocol:

- Clean and disinfect the chair and any surfaces to be used before each drawing of blood from a subject
- Wash hands with soap and water and dry with single-use towels
- Put on well-fitting, single-use disposable gloves (a fresh pair per subject)
- Disinfect the entry site using a 70% alcohol swab
DO NOT touch the cleaned site, if the site is touched, repeat the disinfection
- Use a single-use device for blood sampling
DO NOT reuse a blood sampling device
DO NOT leave a used device lying outside a sharps container
DO NOT resheath a needle

- Discard the used device directly into a sharps container

Spillages

In the event of a blood spillage, the area should be cleaned and disinfected in accordance with SN36 (provisions for hard floors/surfaces):

1. Place warning signs/cones if necessary to warn others of hazard
2. Disinfect and clean the area. Be sure to dry floors to prevent slips.
 - Thoroughly mop or wipe the area with detergent *and dry*
 - Thoroughly mop and wipe the area with disinfectant *and dry*
3. Any splashes of blood or bodily fluid on the skin should be washed off immediately with soap and water
4. Any waste should be placed in Biohazard bags and treated as biological waste.

Incidents

In the event of faintness or lack of consciousness seek assistance from a first aider.

In the event of vomiting seek assistance from a first aider. For clean up see SN 36.

In the event of a needle-stick injury seek assistance from a first aider. For any accident involving broken skin, bleeding should be encouraged without applying pressure to the wound, and the area washed with soap and water.

In the event of a needle-stick injury or where a wound may have been contaminated with the subject's blood follow the protocol previously devised for the work and available in plain sight in the phlebotomy facility. A medical assessment may be required (for example at an Emergency Department or a walk-in clinic). Post-exposure prophylaxis may be prescribed by a medical professional. If post-exposure prophylaxis is required, this should be commenced within 72 hours of the incident.

Report any incident to Health and Safety Services using the [online incident notification system](#) as soon as possible. Occupational Health should also be informed of any such incident on the next working day.