UNIVERSITY OF LIMERICK
OLLSCOIL LUIMNIGH

UNIVERSITY OF LIMERICK RESEARCH ETHICS COMMITTEE

RISK ASSESSMENT FORM – PROCEDURES INVOLVING HUMAN SUBJECTS

Procedure No	**2021_01_21_RA**
Title of Procedure	Blood sampling by venepuncture
Name of Assessor(s)	Alan Donnelly
Assessment Date	October 2000
Does this procedure already have ethical approval? (Delete as appropriate)	**NO**
If **YES**, enter ethical number and expiry date	**Approval No:** Expires: Jan 2031

1 Please provide a brief description of the procedure

Blood samples are obtained according to the Code of Practice attached. To ensure a stable subject position, blood samples are taken from subjects in a supine or seated position. They should sit in this position 5 minutes prior to taking the sample. After the skin is cleansed, blood is taken from the arm by a 20 or 21 gauge needle. The maximum amount of blood taken in any trial is not more than 40mls. Subjects remain seated while applying pressure to the vein after the needle is removed.

2 Location in which the procedure may take place

x	Teaching Laboratory (PG-050)
x	Research Laboratory (P1-051)

Others, please specify

3 Eligibility of subject(s) to be used

x	PESS student (U.G. or P.G.)
x	University staff or campus personnel

x	Members of the general public engaged in research projects granted ethical approval.

4 Potential risks. To be explained before obtaining consent	
x	None, or minimal discomfort only

All blood sampling carries a risk of infection to the volunteer and to the experimenter. Anyone stating they have a blood disorder preventing them from giving blood will be

excluded from the procedure. Risks can include dizziness, nausea, fainting, bruising and thrombosis.

A third party, preferably of the same sex as the subject, will be present during periods of physical contact between experimenter and subject.

5 Action to be taken in the event of an foreseeable emergency

The procedure will be terminated if the volunteer shows any sign of distress.
In the case of dizziness or fainting, subjects will be placed in the supine position with legs raised. Windows will be opened for fresh air and any restrictive clothing slackened. In the case of more serious situations, personnel in the lab would attempt CPR.
First aid personnel would be contacted, and an ambulance would be requested if necessary.
The University Medical Centre number is 2534 (9:00 am to 5:00 pm)
The University emergency number is 3333

6 Level of supervision required for procedure

x	lecturing/research staff if suitable trained in phlebotomy techniques
x	postgraduate researcher if suitably trained in phlebotomy techniques

Others, please specify

7 Other documentation required for this assessment ?

x	Pre-test subject questionnaire
x	Detailed protocol

Others, please specify

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CODE OF PRACTICE IN OBTAINING VENEPUNCTURE BLOOD SAMPLES
Department of Physical Education and Sport Sciences

1. Hepatitis B immunisation is advisable for all staff that regularly carry out venepuncture/cannulation as, although the donor group would be deemed to be low risk in the circumstances of work in this University, the frequency with which each operator performs the techniques may be high. Immunisation is also advisable for staff or research students who regularly handle blood samples.

2. Subject must fill out pre-test questionnaire. If there is any reason to believe that the subject has a blood disorder (e.g. Hep B, C, HIV), then he/she should not be included in the study.

3. Exclude from taking blood from anyone with obvious open wounds or lacerations on the hands. In any case, during any experimental work these should be covered by a waterproof plaster.

4. Set out the tray with equipment:
    - i) syringe and needle or Vacutainer system
    - ii) sterile swab
    - iii) cotton wool
    - iv) adhesive plaster

5. The experimenter and subject should wash hands with soap and water using a nail brush if necessary.

6. Wear appropriate gloves. Persons with known Latex allergy should wear non-Latex gloves.

7. Swab the site of the puncture, and dispose of the swab in the biohazard bag.

8. Obtain the blood sample by the appropriate means. Swab off excess blood and dispose of the swab in the biohazard bag when bleeding has stopped.

9. Any spillage of blood onto surfaces should be cleaned by using Virkon or a 1:10 dilution of bleach.

10. Dispose of syringe and needle (without resheathing the needle) into the yellow sharps container. Do not attempt to retrieve an item from the sharps container. The sharps container should be sealed before it becomes full to avoid injuries from forcing sharps into a full box. The sharps box should be included in the clinical waste when sealed.

11. Following the procedure, it is good practice to again wash and dry the hands. Dispose of gloves in the biohazard bag. Any blood contaminating the experimenter should be washed off immediately using soap and water.

12. **Should the experimenter puncture him/herself and consider that he/she has been contaminated, then he/she should encourage local bleeding and wash immediately with hot water and soap. The experimenter must inform the lecturer/demonstrator of the incident. Medical advice should then be sought from UL Medical Centre. The volunteer's sample should be kept for testing for blood borne pathogens. The University of Limerick 'Accident Report Form' should be completed. Forms are available from the PESS administrator's office.**

SS 023

Subject information on Blood sampling using Venepuncture

Venepuncture or venous sampling is a simple procedure taking less than a minute. A person qualified in blood sampling usually takes the blood sample from the cubital vein in the arm. First, the place where the sample is to be drawn is cleaned with an alcohol swab. An elastic tourniquet is placed at a point above the vein (upper arm) and tightened so that a slight pooling of the blood occurs in the vein. This makes sampling easier. A sterile needle and syringe is inserted at an angle (~45°) until a 'flash back' of blood appears in the syringe. There would be no more than a slight pricking sensation. The tourniquet is released and the blood sample is drawn. Before withdrawing the needle from the vein a cotton wool swab is placed at the point of needle entry into the vein. It is held lightly in place as the needle is withdrawn, after which, firmer pressure is applied. Some subjects experience some bruising around the sampling area, but this is usually short term and painless.