

UNIVERSITY OF LIMERICK RESEARCH ETHICS COMMITTEE

RISK ASSESSMENT FORM – PROCEDURES INVOLVING HUMAN SUBJECTS

Procedure No

Title of Procedure

Name of Assessor(s) Assessment Date

Does this procedure already have ethical approval? (Delete as appropriate)

If **YES**, enter ethical number and expiry date

1 Please provide a brief description of the procedure

This procedure is used in the lab classes to obtain small amounts of blood for measurements of blood parameters such as lactate. The procedure involves swabbing the ball of the fingertip with an alcohol swab, then using a sterile lancet to pierce the skin. The lancet is placed in a spring-loaded device, which propels the lancet a fixed distance (a few mm) into the skin when the trigger is pressed. The small amount of blood, which seeps out is then collected with a sterile capillary tube. The volunteer is given a cotton wool pad to mop up any extra blood, and an elastoplast-type bandage is placed over the finger if necessary.

The experimenter wears gloves throughout the procedure. Undergraduates using this procedure will be given full instruction on safe handling of blood and sterile technique in sampling.

2 Location in which the procedure may take place

Others, please specify

3 Eligibility of subject(s) to be used

4 Potential risks. To be explained before obtaining consent

None, or minimal discomfort only

All blood sampling carries a risk of infection to the volunteer and to the experimenter. The technique will take place in a designated area of the teaching laboratory, which will be kept clear for this procedure, and cleaned appropriately. Anyone stating they have a blood disorder preventing them from giving blood will be excluded from the procedure.

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 a foreseeable emergency**

The procedure will be terminated if the volunteer shows any sign of distress.

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

lecturing/research staff if suitable instructed

postgraduate researcher if suitably instructed

Others, please specify

Undergraduate student if suitably trained

7 Other documentation required for this assessment ?

Pre-test subject questionnaire

Detailed protocol

Others, please specify

Department of Physical Education and Sport Sciences

CODE OF PRACTICE FOR OBTAINING CAPILLARY BLOOD SAMPLES

1. Hepatitis B immunisation is advisable for all staff that regularly handle blood, 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) lancet
 - 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 sample. Pierce the skin using a sterile, single use captive lancet. No other device may be used. 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 lancet blade into the yellow sharps container. This 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. Never retrieve an item from the sharps container.
12. Following the procedure, it is good practice to again wash and dry the hands. Dispose of gloves in the biohazard bag.
13. Any blood contaminating the experimenter should be washed off immediately using soap and water.
14. **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.**