Department of Clinical Laboratory Medicine

East Lancashire Hospitals NHS Trust
A University Teaching Trust

Document title	**Sample Collection & Handling**
Section	Clinical Laboratory Medicine
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Area of standard	**ISO 15189:2022 Section 7.2.4** ISO 15189:2012 Section 5.4.4

Contents

1. Purpose

To ensure the proper preparation of the patient, specimen collection and handling that are essential for the production of valid results by the laboratory.

2. Responsibility

- It is the responsibility of the Clinical Laboratory Medicine Management team to ensure that this procedure is available to users of the service and those who are responsible for specimen collection and handling.
- It is the responsibility of those who are accountable for specimen collection and handling to abide by this procedure in order that the laboratory may produce valid results.

3. Verification of pre-examination requirements:

- Before samples are collected, it is the responsibility of the person collecting the sample to ensure that the patient meets any requirements **which affect the results of the test**, or their clinical relevance. These include:
- Fasting status
- Medication status (time of last dose, date of cessation)
- Collection at specific times or time intervals (dynamic function tests)
- Consent – once specimens arrive in the laboratory, it is assumed that the patient has consented to the investigations requested.

Information showing that such requirements are met MUST be added to the request form so that the laboratory has all relevant information at time of sample receipt.

4. Sample requirements:

- Information regarding the sample volume, correct sample container and any additives which are required is included in the departmental User information on the ELHT website. Any samples that have specific requirements will be audited periodically.
- The laboratory uses the Sarstedt Monovette™ blood collection system. Sarstedt will offer training to staff in correct blood collection procedures as required.
- Any samples which are sent and do not meet defined criteria, such as volume, sample container or correct additive/preservative, should be logged (recorded) and the sample taker or department contacted. Appropriate action should be taken, as defined in local procedures such as specimen acceptance/reception SOPs, whilst considering factors, for example, precious/unrepeatable samples.
- Trends and patterns should be monitored and identified as part of local, management or audit reviews and findings raised in Q-pulse.
- Records must be kept of such events.

5. Completion of the request form – patient identity

- Please complete all sections of the request form (electronic or paper) ensuring that the patient's identity has been confirmed and all the details are correct. Failure to do so may result in the delayed submission of a report thus compromising the patient's welfare.
- Refer to Sample Acceptance Criteria document. (PM/SAC)
- It is the responsibility of the person collecting the sample to correctly identify the patient requiring the test. This will be done according to local procedures in General Practice, Wards, depts. etc. For example, for in patients within ELHT sites, the patient will be identified from the ID wristband. Samples should not be collected from patients who do not have wristband present.

6. Sample labeling:

It is vital that samples are labeled in such a way that they are unequivocally linked to the patient from who they are taken. Requirements for this vary by department and are listed fully in the ***Sample Acceptance Criteria (PM/SAC).***

7. High Risk Samples

Specimens are considered to be a high risk to laboratory staff if they derive from the following patients:

- known AIDS or HIV Positive or in suspected risk group e.g., drug addicts and multi-infused haemophiliacs
- known or suspected viral hepatitis or unexplained jaundice
- HBsAg positive
- known or suspected brucellosis/typhoid/parathyphoid A (faeces), Tuberculosis (CSF/urine/faeces)
- pyrexia of unknown origin
- patients with T cell leukaemia and Jakob/Creutzfeldt disease
- known or suspected to be positive with SARS-CoV-2

Please take care in not contaminating the request form or outside of the specimen container.

High Risk samples should be double bagged, and a **RISK OF INFECTION** label added to the specimen containers, request forms and outer plastic bag packaging – this will alert anyone who has reason to handle these samples to any such potential risks.

8. Sample collection information:

- The request should include the identity of the person collecting the sample. This will often be different to the person **requesting the test**. This is useful if they are any queries about the sample on receipt at the laboratory.
- The request should include the date of the sample collection, and where relevant (e.g. for time interval tests) the time of the sample collection.

9. Sample storage / delivery to laboratory

- Most samples can be retained at ambient temperatures before and during transport to the laboratory. Where specific requirements are needed (e.g. refrigeration/freezing of samples) these are listed in the department specific User Information on the ELHT website, and will be audited periodically.
- Any samples which are deemed to be time-sensitive, such as Andrology specimens, MUST be checked on arrival to make sure that they meet the timescale criteria. Acceptance of the sample will be indicated, as a minimum, by date/time stamping and labelling of the specimen. Local procedures MAY also include signing log sheets/request form. This should be detailed in local departmental specimen acceptance/reception procedures.
- For any time-sensitive samples which do not meet the timescale criteria, the departments will have a defined process on how this should be handled (rejected and disposed or accepted and tested but notes in the report to clearly indicate). This should include when samples are precious and the process. A log should be kept in the event of any occurrence so that this can be reviewed for trends and patterns.
- For temperature sensitive samples, it may be difficult for the laboratories to monitor ALL samples to ensure they meet any temperature-sensitive requirements. However, the laboratories should have a process in place to ensure users are aware of the requirement and the potential ramifications if not met. The laboratory should also have audits in place as part of their schedule to audit transport pathways (where feasible). Any findings should be raised as a non-conformance and actioned.

10. Disposal of collection materials:

- All materials used in the collection of samples – e.g. needles, gauzes, etc. must be disposed of according to local departmental Operating Procedures regarding clinical waste.
- More information can be found in ELHT policy ***C071 Waste Management Policy***

11. Needle stick Injuries

- Staff must follow local sample collection procedures in order to avoid needle stick injuries. It is essential not to transport blood gas samples with the needle attached.

See ELHT policy ***CP02 Policy & Code of Practice for the prevention and management of inoculation/sharps injuries.***

12. Radioactive Samples

- Please state the name of isotope given on all samples for analysis (usually urine) after administration.
- NOTE Histology tissues for analysis pose a low risk which is covered by current procedures.

13. Data Protection

All data and patient information will be handled in line with Trust Policies- ***C079 Information Governance Policy 2021, C045 Information Security Policy 2018***