Royal Cornwall Hospitals NHS Trust

Order of Draw Clinical Guideline

V1.0

April 2025

1. Aim/Purpose of this Guideline

The aim of this guideline is to provide guidance from RCH Pathology on the order of draw for venepuncture procedures, special instructions for specified tests, and information on the correct labelling of sample containers.

Data Protection Act 2018 (UK General Data Protection Regulation – GDPR) Legislation.

The Trust has a duty under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed, and documented. We cannot rely on opt out, it must be opt in.

Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 please see the Information Use Framework Policy or contact the Information Governance Team.

Royal Cornwall Hospital Trust rch-tr.infogov@nhs.net

2. The Guidance

2.1. This guidance provides instructions on the correct order of draw for venepuncture procedures, supplementary information and assistance on obtaining tube supplies and correct labelling guidelines.

2.2. Please see the Order of Draw guide on page 2 for guidance and instructions on the collection of Pathology specimens.

3. Monitoring compliance and effectiveness

Information Category	Detail of process and methodology for monitoring compliance
Element to be monitored	The correct collection and subsequent quality of samples submitted to the Pathology service at RCH.
Lead	Section Leads and Senior staff relevant to the department and specific test compliance monitoring.
Tool	Adherence to the guidelines will be monitored as part of the ongoing audit process within the Pathology departments on a Word or Excel template specific to the department and test being audited.
Frequency	Within the audit timeframes as stipulated by the Pathology Quality Management system, or when anomalies in submitted specimen quality and/or volumes are detected.

Information Category	Detail of process and methodology for monitoring compliance
Reporting arrangements	Pathology Quality representatives.
Acting on recommendations and Lead(s)	Pathology Quality representatives and Section Leads and Seniors.
Change in practice and lessons to be shared	Required changes to venepuncture practice will be identified and actioned by Pathology representatives. A lead member of Pathology will be identified to take forward any issues identified with practice to the relevant team or staff member as appropriate.

4. Equality and Diversity

4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the Equality Diversity And Inclusion Policy or the Equality and Diversity website.

4.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1. Governance Information

Information Category	Detailed Information
Document Title:	Order of Draw Clinical Guideline V1.0
This document replaces (exact title of previous version):	New Document
Date Issued/Approved:	October 2024
Date Valid From:	April 2025
Date Valid To:	April 2028
Directorate/Department responsible (author/owner):	Jo Walsh Pathology Optimisation Project Lead, Pathology.
Contact details:	01872 254619
Brief summary of contents:	Order of Draw Guide.
Suggested Keywords:	Order, Draw, Pathology, Venepuncture, Phlebotomy.
Target Audience:	**RCHT:** Yes **CFT:** Yes **CIOS ICB:** Yes
Executive Director responsible for Policy:	Chief Medical Officer
Approval route for consultation and ratification:	Pathology Quality Group. Pathology Seniors and Section Leads.
Manager confirming approval processes:	Lisa Vipond
Name of Governance Lead confirming consultation and ratification:	Sarah Pointon
Links to key external standards:	None
Related Documents:	New Pathology A-Z Test Directory | Intranet - Royal Cornwall Hospitals Trust
Training Need Identified?	No

Information Category	Detailed Information
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet and Intranet
Document Library Folder/Sub Folder:	Clinical/Pathology

Version Control Table

Date	Version Number	Summary of Changes	Changes Made by
October 2024	V1.0	Initial issue	Jo Walsh, Pathology Optimisation Project Lead

All or part of this document can be released under the Freedom of Information Act 2000.

All Policies, Strategies and Operating Procedures, including Business Plans, are to be kept for the lifetime of the organisation plus 6 years.

This document is only valid on the day of printing.

Controlled Document.

This document has been created following the Royal Cornwall Hospitals NHS Trust The Policy on Policies (Development and Management of Knowledge Procedural and Web Documents Policy). It should not be altered in any way without the express permission of the author or their Line Manager.

Appendix 2. Equality Impact Assessment

Section 1: Equality Impact Assessment (EIA) Form

The EIA process allows the Trust to identify where a policy or service may have a negative impact on an individual or particular group of people.

For guidance, please refer to the Equality Impact Assessment Policy (available from the document library) or contact the Equality, Diversity, and Inclusion Team rcht.inclusion@nhs.net

Information Category	Detailed Information
Name of the strategy/policy/proposal/service function to be assessed:	Order of Draw Clinical Guideline V1.0
Directorate and service area:	Pathology/ Clinical Support.
Is this a new or existing Policy?	New
Name of individual completing EIA (Should be completed by an individual with a good understanding of the Service/Policy):	Jo Walsh, Pathology Optimisation Project Lead.
Contact details:	01872 254619

Information Category	Detailed Information
1. Policy Aim - Who is the Policy aimed at? (The Policy is the Strategy, Policy, Proposal or Service Change to be assessed)	Provides guidance on Order of Draw for Pathology venepuncture practices and information on correct labelling of samples.
2. Policy Objectives	Adherence to order of draw and provide labelling guidance to minimise risk of rejection of submitted samples.
3. Policy Intended Outcomes	Assist in correct venepuncture procedures and provide guidance on correct labelling.
4. How will you measure each outcome?	Pathology audits and monitoring of sample submissions.
5. Who is intended to benefit from the policy?	Patients and users of the Pathology service.

Information Category	Detailed Information
6a. Who did you consult with? (Please select Yes or No for each category)	• Workforce: Yes • Patients/visitors: No • Local groups/system partners: No • External organisations: No • Other: No
6b. Please list the individuals/groups who have been consulted about this policy.	**Please record specific names of individuals/groups:** Pathology Quality Group, Pathology Seniors and Section Leads.
6c. What was the outcome of the consultation?	Approved
6d. Have you used any of the following to assist your assessment?	**National or local statistics, audits, activity reports, process maps, complaints, staff, or patient surveys:** No

7. The Impact

Following consultation with key groups, has a negative impact been identified for any protected characteristic? Please note that a rationale is required for each one.

Where a negative impact is identified without rationale, the key groups will need to be consulted again.

Protected Characteristic	(Yes or No)	Rationale
Age	No	
Sex (male or female)	No	
Gender reassignment (Transgender, non-binary, gender fluid etc.)	No	
Race	No	
Disability (e.g. physical or cognitive impairment, mental health, long term conditions etc.)	No	
Religion or belief	No	
Marriage and civil partnership	No	

Protected Characteristic	(Yes or No)	Rationale
Pregnancy and maternity	No	
Sexual orientation (e.g. gay, straight, bisexual, lesbian etc.)	No	

A robust rationale must be in place for all protected characteristics. If a negative impact has been identified, please complete section 2. If no negative impact has been identified and if this is not a major service change, you can end the assessment here.

I am confident that section 2 of this EIA does not need completing as there are no highlighted risks of negative impact occurring because of this policy.

Name of person confirming result of initial impact assessment: Jo Walsh, Pathology Optimisation Project Lead.

If a negative impact has been identified above OR this is a major service change, you will need to complete section 2 of the EIA form available here:
Section 2. Full Equality Analysis

Appendix 3. PA-GEN-GUIDE-7 2024

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Royal Cornwall Hospital Order of Draw

Samples to be collected in the following order

Please check Pathology A-Z Test Directory on the intranet when unsure of sample requirements.

Maxims and ICE will state the type of tube and the number required for requested tests. Please ensure all tubes are correctly inverted (as per the below table) to ensure mixing of the tube's coagulant, anti-coagulant &/or preservatives with the blood sample.

Cap colour	Cat.No	Draw Vol	Tube Type	Determinations	Special Instructions/labelling	Mix by inversion
Discard tube	N/A		N/A	Discard	Gold top or blue top if collecting for Coagulation test.	5 - 6
	N/A	N/A	Blood Culture	Aerobic followed by anaerobic—if insufficient blood for both culture bottles, use aerobic bottle only.	Send via ATTS (air tube system) as soon as possible. Paediatric blood culture bottles (pink tops) available via order line, ext. 4966. Do not cover the manufacturer's bar code on the blood culture bottle. Do not remove any barcode labels from the bottles. See labelling advice below.	
	363095 KFK119	2.7ml	Sodium Citrate	INR, APTT, Platelet Clumping, Coag Screen, Anti Xa, HIT and ADAMTS13 LA screen. Factor Assay and Thrombophilia screen by arrangement only. Call ext. 2502, three tubes required	**Must be filled to the frosted line and mixed well.** Underfilled samples will not be processed. Must be first tube taken after blood cultures. APTT and COAG screen stable for 4h. Paediatric 1ml size available from lab (2502). Please use a discard tube first when using a butterfly collection set.	3 - 4
	N/A	1.2ml	Kit from lab	QuantiFERON-TB Gold PLUS for Mycobacterium tuberculosis infection.	Please contact lab ext. 4900 for kit. Refer to the Microbiology specific blood collection procedure CMB-VIR-INFO-1.	10
	367954 KFK114	6ml	SST II Advance	Routine Chemistry and Immunology. Routine Clinical Microbiology. Antenatal Infection screen. PCR assays for Hepatitis B and C.	Paediatric version also available, please contact lab on ext. 2540 for tube supplies.	6
	367885 KFK173	5ml	Lithium Heparin	Alternative for Electrolytes, if advised by laboratory. May be used for other tests as advised by Maxims/ ICE.	Please contact the lab on ext. 2540 for tube supplies. A paediatric version is also available, please contact the lab if tube supplies required.	6
	367839 KFK171	4.5ml	EDTA	Routine Haematology and other laboratory tests as advised by Maxims/ ICE. (Malaria parasites need to be received by the laboratory within 4 hours of collection to preserve morphology).	Mix well. A paediatric version also available, please contact labs on ext. 2540 (Chem) or 2507/2502 (Haem/Coag) if tube supplies required.	8 - 10
	367941 KFK277	4ml	EDTA cross-match	BLOOD TRANSFUSION LAB ONLY: Cross match, Group and Save, Antenatal Group and Screen, DAT, Kleihauer. Also used for paediatric samples.	Samples must be handwritten or labelled with Trust approved secure bedside labelling device. Forename, surname, unique number (CR or NHS), DOB must be present, in addition to date, time and staff member signature/ electronic username.	8 - 10
	368201 KFK374	6ml	Fluoride Heparin	Glucose, Lactate, Alcohols (Ethanol, Ethylene Glycol and Methanol) and other tests as advised by Maxims/ ICE.	Paediatric version also available, please contact lab on ext. 2540 for tube supplies.	8 - 10
	368381 KFK360	6ml	Trace Elements	Copper, Zinc, Selenium and other tests as advised by ICE/ Maxims.	Contact lab for tube supplies ext. 2540.	8 - 10

Blood tube labelling

Specimen labels should be applied smoothly (no wrinkles) and straight (not crooked) over the EXISTING manufacturer label on the tube. The label should be placed close to the cap of the tube. Ensure that the label does not cover the "window" at the back of the tube as lab staff need to see the quantity of blood in the tube.

Blood culture labelling

- Do not cover the manufacturer's bar code or expiry date (in black box) on the blood culture bottle
- The bar code is scanned in the lab to determine whether the culture is aerobic or anaerobic.

Twisted label

Flag label

Low placed label creating a label tail

Creased label

Double labelled

Label covers the window that is used to assesses volume in tube