

Pathology handbook

Information for Users 2017

The aim of this handbook is to provide the users of Sandwell & West Birmingham Hospitals NHS Trust Pathology services with generic information. Further specific detailed information can be found in the individual pathology disciplines handbooks.



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General Information

SWBH NHS Trust offers a comprehensive pathology service for hospital and primary care users. We also have a range of specialist services that are offered to other laboratories around the UK and overseas. The services are as follows:

City Hospital

- Essential services for Haematology and Clinical Biochemistry
- Blood Bank
- Microbiology & Molecular
- Histopathology
- Phlebotomy

Sandwell Hospital

- Haematology
- Blood Bank
- Clinical Biochemistry
- Immunology
- Serology
- Phlebotomy

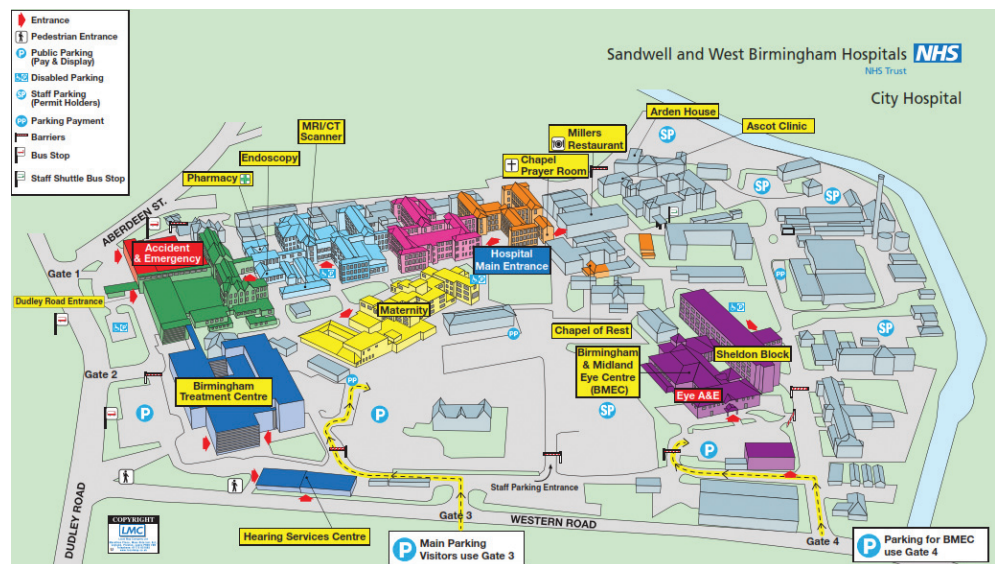
Phlebotomy services are also provided at Rowley Regis Hospital and several community locations.

Location

City Hospital

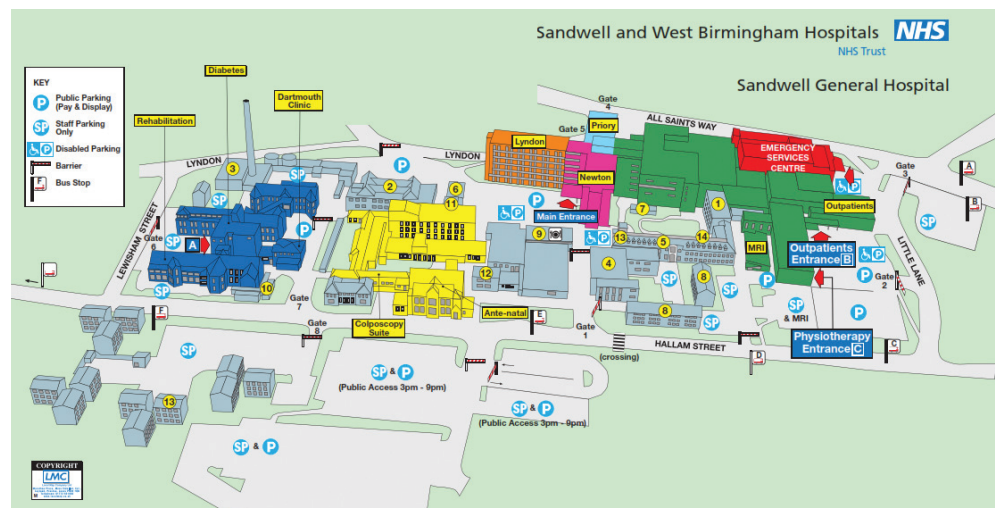
Pathology is located at the top of the main drive, opposite the white colonnades.

Histology and Cytology are located in wards D10 and D9 at the top of the main hospital, ground floor corridor.



Sandwell Hospital

The Pathology Department is located within the main hospital and can be found by following the signs from the lifts on the ground floor main entrance.



Access to Pathology

Access to Pathology is by Trust swipe card (City site) or key fob (Sandwell site) for authorised staff only. Visitors to the department must identify themselves to reception staff, sign in and out of the visitor's book and must only enter the laboratory when accompanied by Pathology staff.

Pathology Opening Hours

	Monday - Friday (excluding Bank Holidays)	Monday - Friday outside routine hours	Saturday and Sunday	Bank Holidays
Pathology Reception: City Hospital	0800 - 1700	Samples must be delivered to Pathology via the vacuum transport system or by placing them in the drop box at the front of the Pathology building.		
Pathology Reception: Sandwell	0900 - 1630	Samples must be delivered to Pathology via the vacuum transport system or by placing them in the drop box outside the Pathology entrance.		
Blood Science & Blood Bank	Full service	Full service	Full service	Full service
Toxicology	Full service	On call service	On call service	On call service
Immunology & Specialist Chemistry	Full service	No service	No service	No service
Microbiology	Full service	On call service	Full service 0900-1700 On call service after 1700	Full service 0900-1700 On call service after 1700
Histopathology	Full service	On call service	On call service	On call service

Laboratory Contact Details

Department	Main Contact
Reception City Site	0121 507 4221
Reception Sandwell site	0121 507 3520
Blood Science call centre	0121 507 5162
Histology	0121 507 5371
Microbiology	0121 507 4261
Immunology	0121 507 4258
Phlebotomy	0121 507 5151
Clinical Biochemistry outside routine hours	City bleep 5172 Sandwell bleep 6225
Haematology outside routine hours	City bleep 5251 Sandwell bleep 6226
Microbiology outside routine hours	Contact through switchboard
Histopathology outside routine hours	Contact through switchboard



Pathology Supplies

Consumables include:

- Request forms
- Sample tubes & phlebotomy consumables
- Collection bottles for urine, stool and sputum screening

Blood tubes are available from Pathology reception on both sites.



















City site contact: 0121 507 4221

Sandwell site contact: 0121 507 3520

Pots for histology samples can be requested directly from the Histopathology Department.



Phlebotomy Tube Types

Item Number	Volume	Cap Colour	Cap Ring Colour	Tube Contents	Tests	Special Instructions
456018	5ml	 Ochre	 Ochre	Clotting Accelerator and Separation Gel	<i>Clinical Chemistry</i> - most analytes including LITHIUM, Antibiotic Assays, Therapeutic Drugs, Glucose (if sample received by Lab within 4 hours) <i>Immunology</i> - most analytes. <i>Virology/Serology</i> - all tests including Hepatitis Serology, HIV & immune status. Haematinics (B12, Folate, Ferritin)	DO NOT use EDTA for B12 Folate and Ferritin
454322	2ml	 White	 White	Trisodium Citrate	PT, INR, PTT, APTT, Fibrinogen, D Dimers, Protein C, Free Protein S, ATIII, Lupus Anticoagulant, Thrombophilia Screen	For Lupus testing and Thrombophilia Screen: 4 Citrate tubes required.
454327	3.5ml	 Blue	 Black			
456084	6ml	 Green	 Black	Li Heparin	Osmotic Fragility, Chromosomes, Karotyping, 'T' spot, IGRA (TB), Calcitonin Mycobacterial Blood Cultures	For Calcitonin - notify lab and send immediately. For Quantiferon (IGRA) tests special tubes are required; please contact serology.
454036	4ml	 Lavender	 Black	EDTA	FBC, Sickle Screen, G6PD, Plasma Viscosity, Malaria, Retic, ZPP, Monospot, Haemoglobinopathy Screen (Hb electrophoresis, Thalassaemia Screen). ESR, A.C.T.A Tissue Typing 4ml x 5, Bacterial/Viral PCR, CD4, Cyclosporin, TPMT, Homocysteine, ACTH, Blood Porphyrins, Renin, TGN, Lymphocyte markers, Gut hormones	Blood bank - see Crossmatch labelling. EDTA 4ml & 9ml for special tests - contact Lab. ACTH, Renin and Gut hormones – notify lab and send immediately must be received within 30 mins.
454022	3ml	 Red	 Black	EDTA K3	HbA1c - Glycated Hb	DO NOT stick anything on tube below label
454238	2ml	 Grey	 Black	NaF/EDTA	Glucose - if delivery to Lab is delayed and for GP specimens Lactate	
456052	6ml	 Pink	 Black	EDTA for Cross match	Group and Save, Crossmatch. Ante-natal screening	3 tubes required for antibody investigations Samples must be labelled with patient's surname, given name, DoB and unit No., also signed and dated by the blood taker
456080	6ml	 Royal Blue	 Black	Sodium Heparin Trace Elements	Trace element assays including Copper, Zinc and Selenium	

Requesting

Electronic

Electronic requesting is the preferred option for all requests to Pathology with the exception of Histopathology. The use of electronic requesting reduces transcription errors and is encouraged throughout the Trust.

Paper

Histopathology request forms are available from the Histology Department. Microbiology and Blood Sciences request forms are available from Pathology reception on both sites. All forms must be completed with patient information and relevant clinical details. Before sending samples to Pathology, ensure data entered is correct and that information on the form matches that on the sample labels and on the patient wrist band. If completing forms by hand, writing must be clear. Illegible requests may cause errors and compromise the quality of results. If writing by hand print name and include registration number, otherwise use a registration stamp. Please include contact details.

Add on requests

Requests for additional tests must be made directly to the relevant department and will be added if appropriate.

Patient Identification

Patient identification **must** be confirmed before taking a blood sample. All samples **must** be labelled immediately, using either an identification sticker or by writing the patient's full name, RXK number and date of birth on the tube. If the sample is for blood bank, it must be labelled by hand, all the boxes on the specimen label **must** be completed and it **must** be signed. Blood Bank samples with printed labels will be rejected.

- NEVER pass samples to someone else for labelling
- NEVER label tubes before you take blood samples
- If the outside of containers become contaminated with blood or other body fluids, ensure the containers are wiped clean before sending them to the laboratory.
- Ensure caps are closed securely to prevent leakage.

NOTE: A syringe must never be used to inject a sample into a Vacuette tube. This practice is hazardous (being a common cause of needlestick injury) and will compromise the quality of the sample.

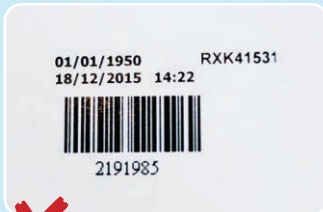


Guide to Taking a Perfect Blood Sample

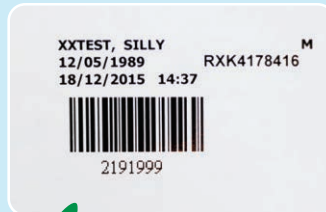
1 Request forms

- Use electronic requesting wherever possible.
- Contact your IT department for assistance with aligning your printer.
- Hand written request forms **MUST** include surgery & doctor's name, preferably using the surgery's stamp.

Date and time of sample collection and ID of person taking sample must be clearly written on the form here.



Barcode missing patient's name and part of patient ID (e.g. RXK)



All patient information clearly visible on barcode

Sandwell & West Birmingham Hospitals NHS Trust - Pathology - Combined Science & Immunology
Hospital No & Name: RXK4178416 XXTEST, SILLY
Date of Birth: 12/05/1989
Sex: Male
NHS No: SANDWELL DISTRICT GENERAL HOSPITAL, LYNDON
Address: WEST BROMWICH, B71 6HA
Admin Location: SP: Dr Nazim Adni (I)
Clinic Details: fasting
Investigations Requested: (F) Full Blood Count (UE) UE and Creatinine/wGFR (Renal)
Category: NHS
Specimen Collection Instructions: For these investigations you require the following samples: 1 x Lavender Top (4ml EDTA) 1 x Ochre Top (5ml Serum)
Collect Date/Time: 18/12/2015 14:37
Sample Taken By: _____
Sandwell and West Birmingham Hospitals NHS Trust

2 Taking blood

Correct Technique

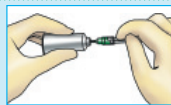
- Refer to Greiner information sheet.



First of all remove the cover over the valve section of the multisample needle.



Screw the needle into the tube holder.



Insert the needle into the vein as usual.



Push the tube into the holder and onto the needle valve puncturing the rubber diaphragm. **Hold tube in place with the thumb until tube is filled to the required level.**



When the first tube is full and the blood flow ceases remove it from the holder. Further samples can then be collected by introducing more tubes into the holder.



Mix tubes by inversion 6-8 times. After the last tube has been collected remove the needle from the vein.



Order of Draw

- Bloods **MUST** be taken in the correct order to avoid sample contamination.
- **Invert Samples 6-8 times**



First

Last

Labelling Samples

- Labels must be attached to the sample tube as straight as possible with a gap left so sample is visible. If there are no sticky labels: all patient information **MUST** be clearly written by hand.



Transport of Samples to the Laboratory

All samples must be packaged in plastic specimen bags and sent to the laboratory in a safe manner.

For regular transport of multiple samples, bags and boxes that comply with Health & Safety regulations are available from Pathology.

For any queries relating to transport of samples across sites or GP Practices please email: swbh.pathology-it@nhs.net.

Use of Vacuum Transport Systems

Most samples can be transported directly into the laboratory via the vacuum transport (air tube) systems. However, it is important to remember that the system **MUST NOT** be used for the following:

- Histology samples in formalin
- Cytology samples
- Items weighing over 1.5Kg
- Flammable substances
- Sharps
- Glass containers
- Any samples known or suspected to have TB or other Mycobacteria infection
- Items that are temperature sensitive

It is not recommended to send blood gas samples or non-repeatable samples such as CSF in the system. Samples must be packaged in a plastic transport bag and placed in a correctly closed, system specific carrier.

At Sandwell site

- Select destination Pathology (3130 or 3131)
- Place the carrier in the system
- Green and orange lights indicate sample is in transit

At City site

- Access system with key code c1980Y
- Place carrier in system and select destination 222
- Green light indicates sample is in transit

System faults must be reported to Pathology.

High Risk Samples

Any sample that is considered to be human pathogen hazard group 4 e.g. ?viral haemorrhagic fever, ?MERS-CoV etc **MUST NOT** be sent using the vacuum transport systems. Please contact Microbiology on extension 4261 and send urgently to the laboratory using a clean red UN3733 transport box. Always speak to the Consultant Microbiologist prior to taking any samples as they can advise you appropriately.

Please follow the IFC Policy on the Care and Management of Viral haemorrhagic fever/human pathogen hazard group 4 infections SWBH/COI/024 and Infection Prevention and Control in the Collection, handling and safe transportation of Pathology specimens in clinical areas SWBH/COI/033.



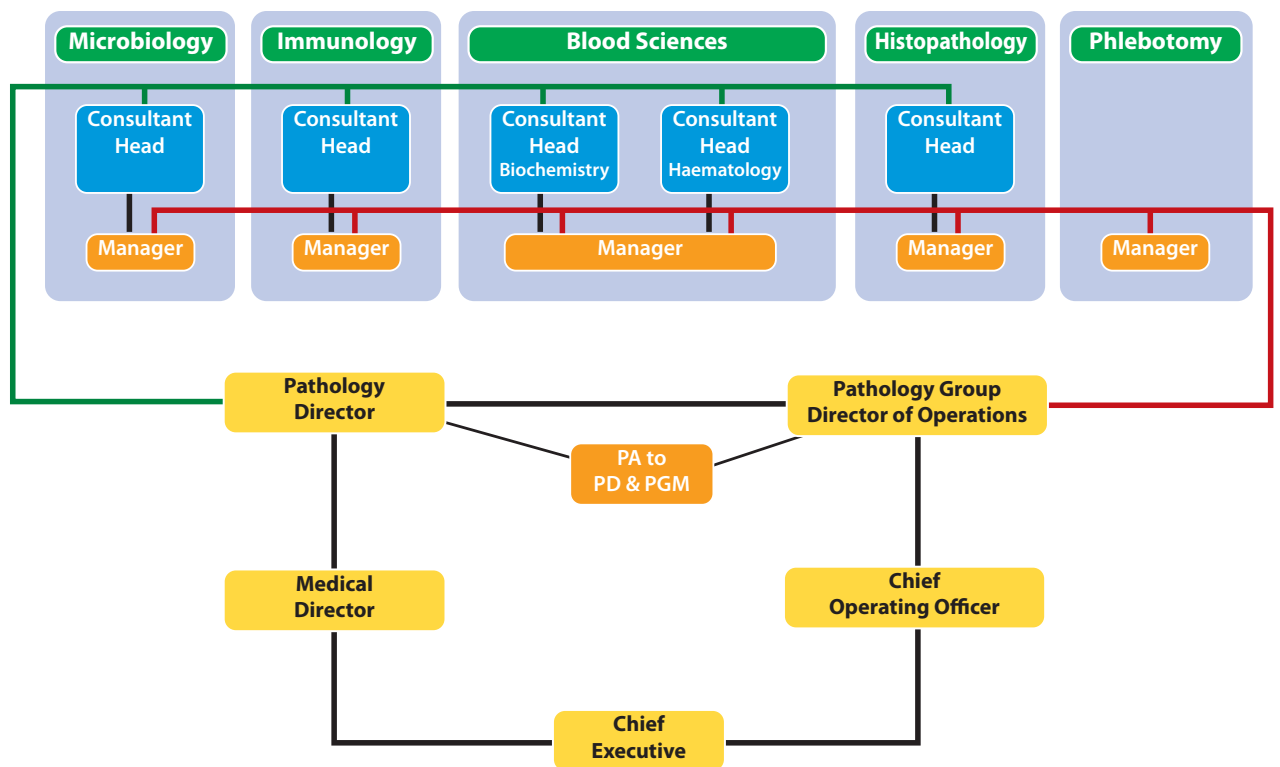
General Pathology

Overview of Pathology

Contact Details

Contact	Number	Email address
Pathology Director Professor Jonathan Berg	0121 507 5353	jonathanberg@nhs.net
Pathology Group Director of Operations (Manager) Jonathan Walters	0121 507 5576	jonathan.walters@nhs.net
PA to Director and Group Manager Nadine Bennett	0121 507 5576	nadine.bennett@nhs.net

Organisational Chart



Blood Science – Clinical Biochemistry

The main laboratory is located at Sandwell Hospital, with a smaller laboratory providing essential services at City site.

The Clinical Biochemistry service utilises state of the art robotics and modern analytical instruments to offer a comprehensive service for routine clinical biochemistry testing. This includes provision for hospital inpatients, outpatients and referral samples from general practice.

We operate a 24- hour emergency service for both the hospital and other users of our service. All samples from acute sites are treated as urgent and other samples when they are clearly indicated as being required urgently.

Help with result interpretation and enquiries regarding clinical aspects of the service can be made to the duty biochemist during working hours. Outside of working hours there is a consultant on-call service contactable through the SWBH switchboard.

Contact Details

Contact	Number	Email address
Call Centre (results & general enquiries)	0121 507 5162	-
Consultant Head of Department Professor Jonathan Berg	0121 507 5353	jonathanberg@nhs.net
Consultant Chemical Pathologist Dr. Elizabeth Hughes	0121 507 3184	elizabeth.hughes3@nhs.net
Laboratory Manager Simon Brown	0121 507 3930	simon.brown8@nhs.net
Automation Manager Harlovleen Kaur Bhachu	0121 507 5078	harlovleen.kaur@nhs.net

For further details please see departmental handbook.



Blood Science – Haematology & Blood Transfusion

The main laboratory is located at Sandwell Hospital, with a smaller laboratory providing essential services at City site. There is a blood transfusion laboratory at both City and Sandwell hospitals.

The haematology and blood bank service utilises the latest analytical equipment to have a fast turn round of routine tests. The department offers a comprehensive service for clinical haematology and blood bank. This includes provision for hospital inpatients, outpatients and referral samples from general practice.

We operate a 24- hour emergency service for both the hospital and other users of our service. All samples from acute sites are treated as urgent and other samples when they are clearly indicated as being required urgently. Consultant haematologists are available to offer further advice and testing strategies.

Contact Details

Contact	Number	Email address
Call Centre (results & general enquiries)	0121 507 5162	-
Consultant Head of Department Dr. Shivan Pancham	0121 507 5358	shivan.pancham@nhs.net
Consultant Dr. Christine Wright	0121 507 5358	christinewright1@nhs.net
Consultant Dr. Richard Murrin	0121 507 5358	richard.murrin@nhs.net
Consultant Dr. Yasmin Hasan	0121 507 3095	yasmin.hasan@nhs.net
Consultant Dr. Farooq Wandroo	0121 507 3095	farooq.wandroo@nhs.net
Laboratory Manager Simon Brown	0121 507 3930	simon.brown8@nhs.net
Deputy Manager Helen Watson	0121 507 3671 / 0121 507 5361	helen.watson11@nhs.net
Blood Bank Manager Loraine Blackwood (City)	0121 507 4251	loraine.blackwood@nhs.net
Blood Bank Manager Sue Bradley (Sandwell)	0121 507 3110	sue.bradley3@nhs.net
Blood Bank City site (results & general enquiries)	0121 507 4251	
Blood Bank Sandwell site (results & general enquiries)	0121 507 3110	

For further details please see departmental handbook.



Blood Science – Immunology

We offer a comprehensive service for immunology using modern analytical equipment. Our services are centralised to our Sandwell laboratory.

Staff are available throughout the working day to offer advice on assay requests and on test results as well as their availability on ICM. A medical member of staff is usually available to provide clinical advice by contacting the secretaries on 0121 507 4250.

Contact Details

Contact	Number	Email address
Laboratory (results & general enquiries)	0121 507 4258	-
Consultant Head of Department Dr. Sadia Noorani	0121 507 4250	sadia.noorani@nhs.net
Consultant Dr. Jonathan North	0121 507 4250	jonathan.north@nhs.net
Consultant Dr. Surendra Karanam	0121 507 4250	surendrakaranam@nhs.net
Laboratory Manager Helen Sandy	0121 507 4606	helen.sandy@nhs.net

For further details please see departmental handbook.



Specialist Clinical Biochemistry

The specialist clinical biochemistry laboratories are located at both City and Sandwell Hospital. They will all be located at the Sandwell site by 2018.

Our specialist services are offered both to our own hospital patients and we also act as a referral centre for the rest of the United Kingdom. We endeavour to offer tests that harness the power of modern clinical science that help with efficient and effective patient care. In particular we have pioneered methods in Toxicology, Trace Elements and appropriate routine testing in Pharmacogenomics.

Contact Details

Contact	Number	Email address
Call Centre (results & general enquiries)	0121 507 5162	-
Consultant Head of Department Professor Jonathan Berg	0121 507 5353	jonathanberg@nhs.net
Laboratory Manager Vanessa Lane	0121 507 6027	vanessalane@nhs.net
Vitamins & Trace Elements Laboratory		
Consultant Clinical Scientist Dr Nicola Barlow	0121 507 2947	nicola.barlow1@nhs.net
TPMT		
Principal Clinical Scientist Jenna Waldron	0121 507 5205	jenna.waldron@nhs.net
Manuals Laboratory		
Principal Clinical Scientist Alex Thurston-Postle	0121 507 3441	a.thurston-postle@nhs.net
Toxicology Laboratory		
Laboratory	0121 507 4138	
Consultant Clinical Scientist Dr. Loretta Ford	0121 507 6026	loretta.ford@nhs.net
Principal Clinical Scientist Rachel Jones	0121 507 6024	rachellouisejones@nhs.net

For further details please see departmental handbook.



Microbiology

The main laboratory is located at City Hospital.

The Microbiology Department is a consultant led service staffed by specialist Biomedical Scientists and support staff all providing a quality diagnostic microbiology service. We provide comprehensive services to hospital inpatients, outpatients and referral samples from general practice. The service comprises bacteriology (including mycobacteriology), mycology, parasitology, molecular biology, chlamydia, serology and virology, including rapid assays for the diagnosis of viral and bacterial infection.

Contact Details

Contact	Number	Email address
Results & General Enquiries: Microbiology Laboratory	0121 507 4261 0121 507 4262	-
Results & General Enquiries: Serology Laboratory	0121 507 3530	-
Consultant Head of Department Dr. Natasha Ratnaraja	0121 507 4824	natasha.ratnaraja@nhs.net
Consultant Dr. Tranprit Saluja	0121 507 5742	tsaluja@nhs.net
Consultant Dr. Nimal Wickramasinghe	0121 507 6486	nwickramasinghe1@nhs.net
Consultant Dr. Jonathan Swindells	0121 507 5402	jonathan.swindells1@nhs.net
Registrars	0121 507 6571 0121 507 5497 0121 507 6535	
Laboratory Manager Padma Patel	0121 507 5906	padmavati.patel@nhs.net
Deputy Manager Erin Traynor	0121 507 5693	erin.traynor@nhs.net

For further details please see departmental handbook.



Histopathology

The Histology and Cytology laboratories are located on a single site D10 & D9 on the ground floor at City Hospital. Mortuaries are present on both City and Sandwell Hospital sites.

The Histopathology Department is a consultant led service staffed by specialist Biomedical Scientists and support staff, providing a comprehensive high quality diagnostic histopathology service.

Contact Details

Contact	Number	Email address
Histology laboratory	0121 507 5371	-
Cytology laboratory	0121 507 4266	-
Office (general enquiries)	0121 507 4231 0121 507 5350	-
Mortuary City site	0121 507 4259	-
Mortuary Sandwell site	0121 507 3280	-
Consultant Head of Department Dr. Rachna Awasthi	0121 507 4267	rawasthi@nhs.net
Consultant Dr. Madhavi Maheshwari	0121 507 4268	madhavi.maheshwari@nhs.net
Consultant Dr. Suhail Muzaffar	0121 507 6476	suhail.muzaffar@nhs.net
Consultant Dr. Parveen Abdullah	0121 507 6477	parveen.abdullah@nhs.net
Consultant Dr. Ulises Zanetto	0121 507 5357	ulises.zanetto@nhs.net
Consultant Dr Shakhee Garai	0121 507 6483	shakhee.garia@nhs.net
Consultant Dr Mirza Sharjil Baig	0121 507 4224	mirza.baig1@nhs.nst
Consultant Dr Monica Ahluwalia	0121 507 4267	monica.ahluwalia@nhs.net
Laboratory Manager Diane Edwards	0121 507 4260	diane.edwards@nhs.net
Deputy Manager Rita Mistry	0121 507 6475	rita.mistry@nhs.net
Mortuary Senior MTO Lawson Davis	0121 507 3280	lawson.davis@nhs.net

For further details please see departmental handbook.



Phlebotomy Outpatients

The Phlebotomy Department at City site is located in the Birmingham Treatment Centre, ground floor at City Hospital.

The Phlebotomy Department at Sandwell is situated in the Outpatients Department on the ground floor at Sandwell Hospital.

The Rowley Regis Phlebotomy Department is situated on the ground floor in the Outpatients Department.

Contact Details

Contact	Number	Email address
Phlebotomy Manager Sukhvinder Atkar	0121 507 4824	sukvinder.atkar@nhs.net
Phlebotomy Supervisor Sharon Campbell	0121 507 3650 / 0121 507 3657	sharon.campbell5@nhs.net
Senior Phlebotomist at City Sandra Evans	0121 507 5151	sandra.evans10@nhs.net
Senior Phlebotomist at Rowley Regis Hospital Anita Truslove	0121 507 6323	anita.truslove@nhs.net

A routine phlebotomy service is provided seven days a week from 7am till 10.30am, all blood requests must be ordered on ICM before 5am each morning.

Sandwell Site Phlebotomy Cover

Floor	Wards
1st Floor	AMUB, AMUA & OPAU
2nd Floor	P2, L2, N2
4th Floor	P4, L4, N4
5th Floor	P5, L5, N5

City Site Phlebotomy Cover

Floor	Wards
Ground Floor	AMU1, D5, D7
1st Floor	AMU2, D11, D15, D16 & Female Surgical Ward
2nd Floor	D21, 25, D26, D27

For further phlebotomy details please see pages 4-6.



POCT

The Point of Care Testing (POCT) Committee is run from the Pathology Department and we also offer advice for relevant POCT in primary care. We support POCT when it offers effective and efficient treatment pathways across the pathology disciplines. This includes established procedures such as urinalysis, glucose testing, blood gas and electrolyte analysis. We also look at new innovations as they arise in POCT to see if they have a role for our patients.

POCT Contact Details

Contact	Number	Email address
POCT Manager Vanessa Lane	0121 507 6027	vanessalane@nhs.net
POCT Office	0121 507 5352	swb-tr-swbh-poct@nhs.net

Anticoagulant Services

Our extensive anticoagulant section offers services both within the hospital and community.

Anticoagulant Services Contact Details

Contact	Number	Email address
Anticoagulant Services Manager Joanne Malpass	0121 507 4907	joanne.malpass@nhs.net
Enquiries	0121 507 3615	swb-tr.SWBH-GM-anticoagulant-services@nhs.net

Pathology IT

Pathology IT provides dedicated digital services to the laboratory and its clients. Working in liaison with Trust IT and external suppliers, the service maintains local hardware and software to enable a wide range of electronic requesting and reporting. In addition Pathology IT supplies data and information in support of various administrative requirements.

Pathology IT Contact Details

Contact	Number	Email address
Pathology IT Manager Nick Baker	0121 507 6077	nick.baker@nhs.net
General Pathology IT related queries	0121 507 6600	swbh.pathology-it@nhs.net
Pathology IT Systems Manager Noman Manzoor	0121 507 5366	rnm@nhs.net

