**NHS Greater Glasgow and Clyde**

**Pathology & Mortuaries**

**User Manual**

THIS IS A CONTROLLED DOCUMENT

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# General Information

## Pathology Department

The NHS Greater Glasgow and Clyde (NHSGG&C) Pathology Department is located at the Queen Elizabeth University Hospital (QEUH) within the Laboratory Medicine and Facilities Management Building.

The Department provides a full and comprehensive UKAS accredited Histopathology, Cytopathology and Mortuary service. UKAS Registration number is 9609 and all accredited tests are listed on the UKAS Website below:

<https://www.ukas.com/wp-content/uploads/schedule_uploads/00007/9609%20Medical%20Multiple.pdf>

NB. A number of investigations carried out by the department are currently outside the scope of accreditation including investigations for joint crystals, some antibodies used in immunocytochemistry and Mohs clinic which is serviced by Pathology but is run by Dermatology.

Specialist, regional and national services include:

* Bone & Soft Tissue Pathology
* National Ophthalmic Oncology Service
* Paediatric & Perinatal Pathology
* Neuropathology
* Electron Microscopy.

Cytopathology services include:

* Andrology
* Cervical Cytology
* Diagnostic(Non-gynaecological)Cytology
* Fine needle aspiration (FNA) cytology
* Crystal analysis

The Department is a tertiary referral centre for many specialties.

In addition to the main laboratory at QEUH, the Department operates from two satellite laboratories.

**Glasgow Royal Infirmary (GRI):**

The satellite Laboratory at GRI is located on Level 5 of the “New Lister Building”

Services provided: Intra-operative frozen sections

This Laboratory is only manned for pre-booked requests. It is, therefore, imperative that frozen section requests at GRI are received by the Pathology Department >24 hours in advance.

**Golden Jubilee National Hospital (GJNH)**:

The satellite Laboratory at GJNH is located in the laboratory block and is provided under a Service Level Agreement (SLA).

Services provided: Intra-operative frozen sections

 This laboratory is manned 09.00-13.00 Monday – Thursday. Out with these times any request for intra-operative frozen section will be sent to the Pathology Department, QEUH

**Mortuary Services** provided on QEUH site include:

• Body store facilities for Queen Elizabeth University Hospital Campus and wider Health Board area, Police Scotland and Crown Office and Procurator Fiscal Service (COPFS).

• Autopsy services for NHSGGC - all adult, paediatric and perinatal post mortems are undertaken within the facility.

• Paediatric and perinatal autopsies for other Scottish Health Boards.

• Paediatric Forensic autopsies undertaken on behalf of COPFS undertaken by NHSGGC Paediatric Pathologists.

• Adult Forensic autopsies undertaken on behalf of COPFS undertaken by visiting Forensic Pathologists from University of Glasgow, Department of Forensic Medicine.

The mortuary is staffed and open 24 hours/day, 365 days/year for the receipt of bodies from the QEUH Campus and on behalf of Police Scotland and COPFS

Viewings are by appointment only.

Normal working day (Mon-Fri) 08:30- 16:30

Out of Hours (Saturday/ Public Holidays) 10:00 – 14:00

Service hours for satellite sites as follows:

Glasgow Royal Infirmary; Gartnavel General Hospital; Royal Alexandra Hospital.

Normal Working Day (Mon-Fri) 08:30-16:30

Service Hours for Inverclyde Royal Hospital satellite site:

Normal working day (Mon-Fri) 10:00- 14:00

Service hours for Vale of Leven Hospital Satellite site:

A body receipt and release service is provided in conjunction with Facilities Management colleagues at VOL. Viewing can be accommodated on request by telephoning QEUH Mortuary on 0141 354 9357

Mortuary information is available from the NHSGGC Mortuary Operations Manager

Mrs Eileen Docherty - (tel. 0141-354-9351) or from senior staff through switchboard: x1000

**OPENING HOURS**

The Pathology Department is open:

Monday – Friday: 090:00-17:00

Saturday and public holidays: 08:00-12:00

The Pathology Department specimen reception is also open Monday-Friday 17:00-19:00 for the receipt and handling of specimens delivered by “late vans” and couriers.

**SPECIMEN TRANSPORT**

All specimens, with the exception of those dealt with immediately at the satellite Laboratories at GRI and GJNH are transported to the Pathology Department at QEUH for processing. Transportation of specimens is undertaken by Facilities staff (porters and drivers) and couriers.

Routine specimens originating at all NHSGG&C hospital sites will be delivered to specimen despatch points on each hospital site for onward transportation to the QEUH Laboratory Building by facilities staff.

There are dispatch points in all hospital sites and transport hubs which form part of NHSGGC transport network.

**Dispatch points:**

|  |  |
| --- | --- |
| * Gartnavel General Hospital (GGH)
 | * Stobhill ACH (North ACH)
 |
| * Glasgow Royal Infirmary (GRI)
 | * Vale of Leven Hospital (VOL)
 |
| * Inverclyde Royal hospital (IRH)
 | * Victoria ACH
 |
| * Royal Alexandria Hospital (RAH)
 |  |

**Transport Hubs:**

● Glasgow Royal Infirmary

● Royal Alexandria Hospital

● Inverclyde Royal hospital

**Contacts:**

Mr Jim Magee – Transport Manager (Tel. 0141 201 1805)

Specimens from GJNH are delivered directly to QEUH by GJNH facilities staff.

#

# Histopathology Specimens

All specimens must be accompanied by an appropriately completed request form.

* Trakcare form
* NHSGGC Pathology request form (available through PECOS *Product code 100509*)

The data required on the request form includes:

* CHI number
* First and surname,
* Date of birth
* Nature of specimen including site and laterality (i.e. Left/Right), if applicable
* Hospital, GP/Dental practice
* Ward/clinic location
* Date and time of request.
* Consultant and requesting doctor including full first name
* Alerts to known or suspected danger of infection

**The full address to which the report should be sent must also be included.**

N.B: Pre-printed labels do not indicate the address to which the report should be sent.

* A short clinical history must also be provided.

 A brief clinical history is invaluable in the interpretation of the histological findings and should be given in every case.

As many pathology cases require considerable clinico-pathological discussion before a diagnosis can be reached, it is essential that the name of the patient’s consultant, the name of the requesting doctor and the contact telephone or page numbers are put on the request form where asked.

If the report is required urgently this should be stated on the request form along with a contact telephone number or page number.

The minimum data required on each specimen container includes:

* CHI number
* First and surname,
* Date of birth
* Nature of specimen including site and laterality (i.e. Left/Right), if applicable

**The laboratory cannot supply a report on unlabelled specimens or specimens received without request forms.**

Failure to provide the required information may result in delays in processing specimens and/or in the provision of a Pathology report to the appropriate location.

## Histopathology Non-conformance

If a specimen is received in Histology and the specimen and/or request form has been mislabelled, is unlabelled or there are discrepancies between the request form and specimen container, the Laboratory staff will make every attempt to contact the sender to clarify the error, including telephoning the source and contacting requesting clinician etc. identified from any information that has been supplied.

If the Laboratory staff are unable to rectify the problem by telephone, a “Non-conformance letter” will be sent to the requesting clinician.

This letter is accompanied by the request form and identifies the nature of the non-conformance with a request that this is rectified and the requesting clinician takes responsibility for the changes.

Specimens are NOT returned but will be kept in Pathology Specimen Reception labelled with the appropriate non-conformance number, until the non-conformance has been resolved.

## Sending a Specimen to Pathology

Specimens should be sent to:

Specimen Reception (L3/B/021),

NHSGGC Pathology Department

Level 3, Laboratory Medicine and Facilities Management Building

Queen Elizabeth University Hospital

Tel: 0141 354 9513 (89513)

 0141 354 9514 (89514)

## Urgent Specimens for Histopathology

It is the responsibility of the clinical team to ensure that emergency/urgent specimens are transported urgently to the Pathology Laboratory.

## Fixation (tissue preservation)

Normally, specimens should be transferred in a sealed container with buffered formalin, which prevents tissue decay, ideally the volume of formalin should be at least 10 times the volume of the specimen, but for major resections this may not be possible.

Please ensure that containers are properly sealed before dispatch as leaking specimens will not be picked up by Transport/ Facilities staff.

If you have a Formalin spill, follow your own spill procedures.

## Exceptions

No fixative should be added if:

* a frozen section is requested
* the specimen is thought to be a lymphoma – whole lymph nodes only
* there is a need to collect and process fresh surplus tissue for medical research purposes

All fresh tissue must be delivered to the Pathology Department immediately and Pathology Specimen Reception should be notified that fresh tissue has been sent.

Tel: 0141 354 9513 (89513)

 0141 354 9514 (89514)

If you are unsure of the correct procedure, contact Pathology Specimen Reception for advice on the telephone numbers above.

***Delay in receipt of “fresh” specimen may make diagnosis impossible.***

Fixatives and specimen jars are available from:

* Specimen Reception (L3/B/021),

 NHSGGC Pathology Department

 Level 3, Laboratory Medicine and Facilities Management Building

 Queen Elizabeth University Hospital

 Tel: 0141 354 9513 (89513)

 0141 354 9514 (89514)

* [Local Mortuary/ Body Stores - non-QEUH sites](#Bodystores)

## Precautions for “Danger of Infection” (DOI) specimens

In practice, these are specimens that carry the risk of transmitting Hepatitis B virus, Hepatitis C virus, HIV, M. tuberculosis and other category III pathogens.

The Clinical Microbiology Department should be contacted where there is any uncertainty.

Such specimens, include those from confirmed or suspected cases of the disease, known carriers (e.g. those known to be hepatitis antibody or antigen positive), as well as patients from an ‘at risk’ group (e.g. drug abusers).

 ‘Danger of infection’ (DOI) stickers **MUST** be put on the specimen bag, the request form and the specimen container.

If the nature of the DOI is known please include in clinical details.

Specimen bags should be sealed so that they can be opened without the use of sharp or pointed instruments.

For large specimens, containers should be enclosed in individual plastic sacks tied at the neck. The request form should be placed in a plastic envelope which is then securely tied to the neck of the sack.

“Danger of Infection” specimens should always be sent in an adequate volume of buffered formalin.

## Histopathology Reporting

## Pathology Reports

All specimens are booked into the laboratory information system (LIMS) on receipt, and their progress is tracked through the laboratory by the Cerebro electronic tracking system. The completed report is authorised electronically.

The report issued will include:

* The clinical history provided
* a gross description of the specimen
* a microscopic description
* the diagnosis or differential diagnosis
* where appropriate, a summary including TNM staging of tumours.

A paper copy of each report is printed following authorisation and despatched by internal hospital mail.

## Computer access to reports

Pathology results are transmitted electronically to SCI store, and can be accessed via the Clinical Portal.

## Telephone reports

Reports will be read to doctors, specialist nurses or other duly authorised personnel only.

##

## Faxed reports

Faxing of reports is not encouraged due to problems of confidentiality, and will only be allowed in exceptional circumstances. To request a faxed report, please telephone the contact numbers below.

Copies of reports can, however, be e-mailed to an appropriate .ggc or .net account.

## Contact Numbers

Results: 0141 354 9476 (89476)

General Enquiries: 0141 354 9500 (89500)

## Turnaround Times

The NHSGGC Pathology Department issues in excess of 100,000 histology reports per annum.

The department is working towards the Royal College of Pathologists (RCPath) KPI for turnaround times for cellular pathology. (All cases 80% - 7 days, 90% - 10 days)

* 76% of cases are reported in 21 days (2018 average)

## Expected Turn Around Times

N.B: Days are ALL days, measured currently from date of receipt of the specimen by Pathology Department

* Cancer Tracked cases: >90 % reported within 7 days
* Cases required for MDT discussion: > 95% of all cases (biopsy and resection) available for discussion at appropriate MDT

*These figures exclude specimens that require prolonged decalcification and/or surgical input for orientation etc.*

Some biopsy or resection specimens require special stains or immunocytochemistry to aid diagnosis. In these cases, it may not possible to meet the above turnaround times.

N.B Where molecular testing is required TAT can increase by 2-3 weeks for all Specialties.

## Specialty Teams

The Department operates a specialist reporting system whereby, groups of specialist pathologists work as a team to report specimens and attend associated multidisciplinary team (MDT) meetings

The specialty teams within the Department are:

|  |  |
| --- | --- |
| * Autopsy
 | * Haemato-lymphoid Pathology
 |
| * Bone & Soft Tissue Pathology
 | * Head & Neck Pathology
 |
| * Breast Pathology
 | * Medical Renal Pathology
 |
| * Cardiovascular Pathology
 | * Neuropathology
 |
| * Dermatopathology
 | * Ophthalmic Pathology
 |
| * Diagnostic (Nongyn) Cytology
 | * Paediatric & Perinatal Pathology
 |
| * Gastrointestinal (GI) Pathology
 | * Respiratory Pathology
 |
| * Gynaecological Pathology
 | * Urological pathology
 |
| * Gynaecological Cytology
 |  |

## Immunohistochemistry

In line with the European Directive on In Vitro Diagnostic Medical Devices (98/79/EC), the department intends to migrate towards a fully CE marked antibody range.

There are currently a limited number of non-CE marked antibodies being used in the department for diagnostic purposes; however, all antibodies in use are fully validated by the laboratory in order to ensure that results are accurate and robust.

The use of non-CE marked antibodies has no detrimental impact on the diagnostic process.

# Special Procedures

## Intra-operative frozen section requests

An intra-operative frozen section service is available Monday – Friday 09:00-17:00

**Pre-Booking a frozen section**

The requesting clinician user MUST ensure that:

* Pathology Duty Consultant is notified of frozen section request 24 hours in advance of sample collection, via Pathology Specimen Reception on 0141 354 9513 or 0141 354 9514 (89513/89514)
* On the day of surgery, theatre staff notify Pathology reception that the frozen

 section is on its way to the Laboratory.

**Failure to pre-book an intra-operative frozen section may result in delays in reporting and in exceptional circumstances the request being declined.**

When pre-booking an intra-operative frozen please provide the following details:

* Patient’s name and CHI number
* Requesting clinician
* Theatre name/number including hospital
* Likely time of operation
* Contact number
* Specimen type

The Consultant Pathologist will phone the result to the requesting clinician on the contact number given.

 **Queen Elizabeth University Hospital (QEUH)**

**Golden Jubilee National Hospital (GJNH)**

An intra-operative frozen section service is provided, on site at GJNH, Monday-Thursday 09:00-13:00. Any cases requiring a frozen section should be recorded on the GJNH theatre lists.

To arrange an intra-operative frozen section out with these times please contact the Duty Pathologist via Pathology Specimen Reception at QEUH on the telephone number below.

These specimens will be transferred to Pathology Department at QEUH for processing and should be sent by taxi to:

Specimen Reception (L3/B/021),

NHSGGC Pathology Department

Level 3, Laboratory Medicine and Facilities Management Building

 Queen Elizabeth University Hospital

Tel: 0141 354 9513 (89513)

 0141 354 9514 (89514)

**It is the responsibility of staff at GJNH to arrange rapid transfer of these specimens to QEUH as per local protocol.**

**Glasgow Royal Infirmary** **(GRI)**

An intra-operative frozen section service is available Monday – Friday (insert the hours as per QEUH) as required.

This Laboratory is only manned for pre-booked requests. It is, therefore, imperative that frozen section requests for on site analysis at GRI are received by the Pathology Department >24 hours in advance.

From time to time an urgent frozen section is required due to an unexpected finding at surgery. The department provides this service, but for intra-operative frozen section requested on site at GRI, a short delay is inevitable to allow staff to travel.

Alternatively the specimen can be sent to QEUH urgently by courier by telephoning:

 0845-123-1230.

The information required by Eagle couriers includes:

* Hospital site
* Theater collection point
* Advise that this is an “Emergency Pathology Specimen”.
* Codes used for each location should be as per local protocols.
* Please telephone Pathology Specimen Reception on 0141 354 9513 or 0141 354 9514 (89513/89514) when the courier is on the way.

## Labelling frozen section specimens

The minimum data required on each specimen container for specimens submitted for intra-operative frozen section is:

* CHI number
* First and surname,
* Date of birth
* Nature of specimen including site and laterality (i.e. Left/Right), if applicable

There should be an accompanying request form which includes:

* CHI number
* First and surname,
* Date of birth
* Nature of specimen including site and laterality (i.e. Left/Right), if applicable
* Hospital
* Theatre
* Date and time of request.
* Requesting clinician
* Alerts to known or suspected danger of infection
* Clinical History
* Theatre contact number

## Transporting Specimens for Intra-operative Frozen Section

**QEUH site:**

Specimens should be sent directly to:

Specimen Reception (L3/B/021),

NHSGGC Pathology Department

Level 3, Laboratory Medicine and Facilities Management Building

Queen Elizabeth University Hospital

Tel: 0141 354 9513 (89513)

 0141 354 9514 (89514)

**Other sites**

Specimens taken at other sites out with stated service provision at GJNH and GRI should be sent directly to the Pathology laboratory at QEEH by courier.

The courier should be telephoned by theatre staff, telephone Eagle Couriers on 0845-123-1230 at least 30 minutes before the specimen is available on the day of the operation.

The information required by Eagle couriers includes:

* Hospital site
* Theater collection point
* Advise that this is an “Emergency Pathology Specimen”.
* Codes used for each location should be as per local protocols.
* Please telephone Pathology Specimen Reception on 0141 354 9513 or 0141 354 9514 (89513/89514) when the courier is on the way.

## Fresh Lymph Nodes for suspected lymphoma

Excised lymph nodes, for suspected lymphoma should be bisected alone their long axis at the time of removal.

Half of the specimen should be placed into a sealed container with buffered formalin. The second half of the specimen should be placed in dry container, without formalin and sent “fresh” to the Pathology Department to allow ancillary testing to be undertaken.

It is particularly important that any Danger of Infection is recorded on the request form.

**Queen Elizabeth University Hospital**

Specimens taken at QEUH should be sent immediately to:

Specimen Reception (L3/B/021),

NHSGGC Pathology Department

Level 3, Laboratory Medicine and Facilities Management Building

 Queen Elizabeth University

Tel: 0141 354 9513 (89513)

 0141 354 9514 (89514)

## Other sites

Fresh lymph nodes or other fresh specimens taken at sites other than QEUH should be transported to QEUHby courier.

The courier should be telephoned by theatre staff, telephone Eagle Couriers on 0845-123-1230 at least 30 minutes before the specimen is available on the day of the operation.

The information required by Eagle couriers includes:

* Hospital site
* Theater collection point
* Advise that this is an “Emergency Pathology Specimen”.
* Codes used for each location should be as per local protocols.
* Please telephone Pathology Specimen Reception on 0141 354 9513 or 0141 354 9514 (89513/89514) when the courier is on the way.

# Orthopaedic Amputations

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* The orthopaedic theatre should contact Pathology Specimen Reception at least 24hrs before procedure is scheduled on 0141 354 9513 or 0141 354 9514 (89513/89514) to request that a dedicated large amputation specimen container is sent to relevant theatre.

Specimens such as amputations that have a high ratio of surface area covered by skin should be sent **unfixed.** If there is a surgical stocking, leave in place.

Reasons for this are:

* Poor penetration of skin by formalin
* Moving and handling considerations

To contain potential leakage, put the amputation into a large plastic bag or wrap in drapes as appropriate and then put into the amputation container. **Never** use yellow or orange bags or containers as this corresponds to the code for waste incineration.

**Queen Elizabeth University Hospital**

Specimens taken at QEUH should be sent immediately to:

Specimen Reception (L3/B/021),

NHSGGC Pathology Department

Level 3, Laboratory Medicine and Facilities Management Building

 Queen Elizabeth University Hospital

Tel: 0141 354 9513 (89513)

 0141 354 9514 (89514)

**Other sites**

Fresh large limb resections taken at other sites should be sent to QEUH by courier

The courier should be telephoned by theatre staff, telephone Eagle Couriers on 0845-123-1230 at least 30 minutes before the specimen is available on the day of the operation.

The information required by Eagle couriers includes:

* Hospital site
* Theatre collection point
* Advise that this is an “Emergency Pathology Specimen”.
* Advise that this is a large specimen (requires van rather than motorcycle courier)
* Codes used for each location should be as per local protocols.
* Please telephone Pathology Specimen Reception on 0141 354 9513 or 0141 354 9514 (89513/89514) when the courier is on the way.

# Cytology Service - Diagnostic Cytology

All specimens must be accompanied by an appropriately completed request form.

* Trakcare form
* NHSGGC Pathology request form (available through PECOS *Product code 100509*)

The data required on the request form includes:

* CHI number
* First and surname,
* Date of birth
* Nature of specimen including site and laterality (i.e. Left/Right), if applicable
* Hospital, GP/Dental practice
* Ward/clinic location
* Date and time of request.
* Consultant and requesting doctor including full first name
* Alerts to known or suspected danger of infection

**The full address to which the report should be sent must also be included.**

N.B: Pre-printed labels do not indicate the address to which the report should be sent.

* A short clinical history must also be provided.

The cytology appearances must be interpreted within the clinical context therefore the request form should include a relevant clinical history and any previous cytology or histology case numbers.

As many pathology cases require considerable clinico-pathological discussion before a diagnosis can be reached, it is essential that the name of the patient’s consultant, the name of the requesting doctor and the contact telephone or page numbers are put on the request form where asked.

If the report is required urgently this should be stated on the request form along with a contact telephone number or page number

The minimum data required on each specimen container includes:

* CHI number
* First and surname,
* Date of birth
* Nature of specimen including site and laterality (i.e. Left/Right), if applicable

**The laboratory cannot supply a report on unlabelled specimens or specimens received without request forms.**

Failure to provide the required information may result in delays in processing specimens and/or in the provision of a Pathology report to the appropriate location.

## Mislabelled diagnostic cytology requests.

In the event of an urgent specimen being received in diagnostic cytology, where the specimen and/ or request form has been mislabelled, the technical staff in the lab will make every attempt to contact the sender to clarify the mislabelling error, including telephoning the source and contacting requesting clinician etc. identified from any information that has been supplied.

In the event of there being insufficient information to allow cytology to contact the sender, the specimen will be kept refrigerated for one week, in the hope that the lab will be contacted.

If no contact has been made at the end of this period, the specimen will be discarded.

## Urgent Specimens for Cytology

Requests for urgent results should be clearly marked on the request form and contact telephone or page numbers provided.

The consultant Cytopathologist should be notified first by telephone, if an urgent result is required.

It is the responsibility of the clinical team to ensure that emergency/urgent specimens are transported urgently to the Pathology Laboratory.

## Diagnostic Cytology Specimens

## General

All specimens should be sent to the laboratory as soon as possible. If it is necessary to keep the specimen overnight, it should be refrigerated.

## Fine needle aspirates

A maximum of four smears should be prepared, e.g. two wet fixed and two air-dried. The fixed and unfixed slides should be sent to the laboratory in separate plastic slide mailers, appropriately labelled (WF or AD, plus patients name and DOB)

The needle should be gently rinsed in a Universal container containing 10ml sterile saline.

**The needle should not be sent to Cytology**. If glass slides are not available to the aspirator, the needle should be rinsed in saline and the saline washout submitted.

## Serous fluids

The minimum suitable volume for cytological diagnosis is 50mls. If less than 50mls is obtained, the whole volume should be sent to Cytology for processing.

## Respiratory specimens

* **Sputa and aspirates/lavages** should be sent to the cytology laboratory in a properly sealed 50ml universal container.
* **Trans Bronchial Needle Aspirates (TBNA’s)** should be sent to the cytology laboratory in **preservcyte®** pots.

* **Bronchial and bile duct brushings** should be sent in either a 30ml or 50ml universal container and topped up with normal saline. To avoid leakage ensure the brushings are cut no longer than 4cm and the container is not filled to the brim with saline. Direct smears should not be made from these brushes at theatre; this practice has the potential to lose significant diagnostic material.

## Pancreatic FNA’s

The specimen should be sent to the cytology laboratory in **preservcyte®** pots.

## CSF Specimens

CSF specimens should be sent to the lab as quickly as possible, using the hospital portering service, if required

## Joint fluids

The specimen should be sent fresh to the cytology laboratory in a sterile Universal container. Do not add anything to the specimen.

## Urine

A mid stream specimen of 30mls maximum, but not the first morning specimen, should be sent in a plain sterile Universal container.

**Preservcyte®** pots are available by contacting the Cytology Laboratory, Specimen Reception on 0141 354 9569.

**Advice and help is available from Cytology Department, QEUH on 0141 354 9569.**

## Precautions for “Danger of Infection” specimens

In practice, these are specimens that carry the risk of transmitting Hepatitis B virus, Hepatitis C virus, HIV, M. tuberculosis and other category III pathogens.

The Clinical Microbiology Department should be contacted where there is any uncertainty.

Such specimens, include those from confirmed or suspected cases of the disease, known carriers (e.g. those known to be hepatitis antibody or antigen positive), as well as patients from an ‘at risk’ group (e.g. drug abusers).

 ‘Danger of infection’ (DOI) stickers should be put on the specimen bag, the request form and the specimen container/slide mailer.

If the nature of the DOI is known please include in clinical details.

Bags should be sealed so that they can be opened without the use of sharp or pointed instruments.

For large specimens, containers should be enclosed in individual plastic sacks tied at the neck. The request form should be placed in a plastic envelope which is then securely tied to the neck of the sack.

## Expected Turnaround times: Diagnostic Cytology

N.B: Days are ALL days, measured currently from date of receipt of the specimen by Cytology Department

* Mean turnaround time for diagnostic cytology specimens is 4.6 days.
* 90% reported in 7 days

##

# Cytology Service - Andrology Service

Semen analysis for sub-fertility and post vasectomy is only carried out at the Pathology Department, Laboratory Medicine/FM Building, Queen Elizabeth University Hospital (QEUH)

## Sub- fertility Analysis

### Prior notification

The patient must arrange an appointment for handing in samples by telephoning:

Pathology Department Office, QEUH between 09:00 -17:00 Monday – Friday (excluding public holidays) on:

0141 354 9487 and select option 1 “Andrology appointments”

***Patients arriving at the department without an appointment may not be seen.***

### Containers

Sub-fertility packs are supplied by the laboratory and these consist of:

* A dry container (labelled “batch tested” with an expiry date)
* A request form
* Patient instruction leaflet
* Directions to Queen Elizabeth University Hospital
* Leaflet entitled “How the NHS protects your personal health information”

All containers should be clearly labelled with:

* Patient’s name
* Date of birth
* CHI number
* Clinician’s name

***Only containers labelled “batch tested” and within expiry date will be accepted.***

### Accompanying Information

Andrology request forms must be completed by the requesting clinician and should contain:

* Requesting clinician’s name and destination for report
* GP practice code (FP number, if appropriate)
* Patient’s surname and forename
* CHI number
* Date of birth,
* Address with post code
* Specimen type
* Relevant clinical information, including drug and alcohol history
* Addressograph labels should be attached to request form, if available

**The patient section must also be completed by the patient.**

To obtain a supply of these packs, please contact:

Cytology Department at QEUH on: 0141 354 9488

Alternatively email request to: Andrology.cytology@ggc.scot.nhs.uk

### Point of delivery

The specimen should be brought by the patient at their appointment time and **within one** **hour of production** to:-

Pathology Department

Laboratory Medicine/FM Building Queen Elizabeth Unversity Hospital

1345 Govan Road,

Glasgow G51 4TF

The patient must report to the reception desk on the ground floor and they will then be directed to the laboratory.

### Production of specimens on-site

If patients are unable to submit a sample within one hour of production, there are facilities available on site to produce their sample.

To make an appointment to use these facilities the patient should contact:

Pathology Department Office, QEUHbetween 09:00 -17:00 Monday – Friday (excluding public holidays) on:

0141 354 9487 and select option 1 “Andrology appointments”

## Post Vasectomy Analysis

### Prior notification

Appointments are not required for routine post vasectomy semen analysis. At least two samples should be submitted, 2-4 weeks apart. The first sample should be after at least 24 ejaculations and 20 weeks post vasectomy.

### Containers

Post Vasectomy packs are supplied by the laboratory and these consist of:

* A dry container (labelled “batch tested” with an expiry date)
* Packaging consisting of absorbent tissue, a specimen bag, a cardboard container and a relabelled jiffy bag.
* A request form
* Patient instruction leaflet
* Directions to the Queen Elizabeth University Hospital

All containers should be clearly labelled with:

* Patient’s name
* Date of birth
* CHI number
* Clinician’s name

 **Only containers labelled “batch tested” and within expiry date will be accepted.**

### Accompanying Information

Andrology request forms must be completed by the requesting clinician and should contain:

* Requesting clinician’s name and destination for report
* GP practice code (FP number, if appropriate)
* Patient’s surname and forename
* CHI number
* Date of birth,
* Address with post code
* Specimen type
* Relevant clinical information, including drug and alcohol history
* Addressograph labels should be attached to request form, if available

The patient section must also be completed by the patient.

### Point of delivery

The sample can be posted to the laboratory by the patient.

It is essential the patient uses ***all the packaging supplied*** in the kit, as instructed in the patient information leaflet, and affixes ***1st class postage.***

These requirements are necessary in order to ***comply with Post Office regulations.***

Alternatively, the sample can be handed in ***(in the packaging provided) Mon – Fri,*** ***excluding public holidays*** to one of the following locations:- ? now applicable

* Pathology Department, Laboratory Medicine/FM Building, Queen Elizabeth University Hospital , 1345 Govan Road, Glasgow ,

08.00-16.30

Ground floor reception desk will direct the patient where to hand it in.

* Laboratory Reception, Level C , Inverclyde Royal Hospital, Larkfield Road, Greenock

08.30-16.30

* Laboratory Reception, Lorne & Islands District General Hospital, Glengallan Road, Oban

Mon & Wed 13.00-17.00 only

* Reception Desk, Ground Floor, Cowal Community Hospital, Argyll Street, Dunoon

08.30-13.00

* Reception Desk, Rothesay Health Centre, High Street, Rothesay

08.30-11.00

### Further samples

If sperm are present in the submitted samples, please advise the patient regarding further samples.

If special clearance is being considered the patient will be required to submit a sample within ***1 hour of production*** to:

Pathology Laboratory, Laboratory Medicine/FM Building, Queen \Elizabeth University Hospital, 1345 Govan Road, Glasgow.

The patient must arrange an appointment for handing in samples by telephoning:

Pathology Department Office, QEUH between 09:00 -17:00 Monday – Friday (excluding public holidays) on:

0141 354 9487 and select option 1 “Andrology appointments”

If the patient is unable to deliver a sample to the laboratory within 1 hour of production an appointment can be arranged to use the facilities on site to produce a sample.

To make an appointment to use these facilities the patient should contact:

Pathology Department Office, QEUH between 09:00 -17:00 Monday – Friday (excluding public holidays) on:

0141 354 9487 and select option 1 “Andrology appointments”

# Determination of Uncertainty in Andrology

Uncertainty in laboratory practice arises where there is the potential for error or variance with an established technique. Biological uncertainty is recognized as an issue in andrology, particularly when only a single sample is tested, therefore making base line results difficult to establish.

Procedural uncertainty has been recognized for the various stages of laboratory processing within the Andrology service, and numerous steps have been taken to minimise these and standardise protocols including:

* stating the defined abstinence period on the patient request form
* requesting production of follow up specimens within a comparable timeframe
* acceptance of complete samples only
* robust patient identification criteria
* production of the specimen within acceptable time period
* toxicity testing of all specimen containers
* patients drug / alcohol history (if appropriate)

Upon arrival of the specimen at the lab, internal and external quality procedures are in place to minimise variation in uncertainty of results. These include;

* patient identification checks at all stages of the process
* checking of all stages of work where there is potential for variance
* all staff involved in andrology participate and are monitored by rigorous IQA and EQA protocols
* all results are checked and authorised by senior BMS staff before being sent out
* report forms contain appropriate lower reference values

Please note: Andrology samples should be reported on average within 48hrs of the laboratory receiving the sample.

## Andrology Reference Values

The lower reference values as published in the WHO manual for the Examination and Processing of Human Semen (2010) are shown in the table below.

Semen is a non-homogenous fluid and measurements cannot be completely accurate as is evidenced in the confidence limits provided.

|  |  |  |  |
| --- | --- | --- | --- |
| Parameter | LowerReference Value | Confidence limits | Departmental Comment |
| Semen volume | ≥ 1.5 ml | 1.4 – 1.7 ml | Low volume could indicate: Incomplete sample, partial retrograde, obstruction or androgen deficiency. |
| pH | ≥ 7.2 |  | Low pH is accompanied by other abnormal measurements, including low volume of semen or low sperm counts. This may point to an obstruction or absence of the vas deferens. |
| Sperm concentration | ≥ 15 million/ml | 12-16 million/ml | A very low sperm count may indicate a partial/full blockage or testicular failure. May recommend a referral to fertility specialist or urologist for investigation |
| Progressive motility | ≥ 32% | 31-34 % | Motility is temperature dependent and samples which take over an hour to reach the lab will be recommended a repeat |
| Total motility | ≥ 40% | 38-42 % |

# Cytology Service – Cervical Cytology

The specimen should be taken as described in the LBC Training CD Rom supplied to smear takers by NHS Greater Glasgow & Clyde. The collected specimen should then be rinsed out into a Thin Prep Pap Test (LBC) specimen vial.

Please ensure the vial is within the date specified. **If it is out of date then it must NOT be used.**

Requests for cervical smears should be generated electronically at the smear taker location using the Scottish Cervical Call and Recall computer system (SCCRS). The vial should be appropriately labelled using the bar coded SCCRS label and sent to the laboratory.

Each LBC sample should be placed in a clear polythene bag and sent to the laboratory.

In exceptional circumstances cervical smear samples can be sent to the laboratory accompanied by a paper request form. Smear takers who send paper requests with the sample to the laboratory must use the official SCCRS Cervical Cytopathology Request Form, which can be downloaded form the NHS Scotland “Show” website.

[http://www.sccrs.scot.nhs.uk/Documents/sccrs/stccrform(Rev%202).pdf](http://www.sccrs.scot.nhs.uk/Documents/sccrs/stccrform%28Rev%202%29.pdf).

Smear takers must give a reason as to why a paper request was sent, such as SCCRS not working at smear taker location.

## Expected Turn Around Times

100% of smears should be reported to smear takers within 5 weeks (35 days).

## Contacts

The Cervical Cytology Department aims to provide the best possible diagnostic service. Should you have a question or comment about any aspect of the service contact:

|  |  |
| --- | --- |
| General Enquiries  | 0141354 9524 |
|  |  |
| Dr Abigail Oakley (Consultant)  | 0141 354 9549  |
| Dr Cynthia van der Horst (Consultant) | 0141 354 9553 |
| Dr Margaret Laing (Specialty Doctor) | 0141 354 9552 |
| Mr Graham Reid (Specialty Manager)  | 0141 354 9541 |

# Autopsy and Mortuary Service

## Arranging for a hospital autopsy (post mortem examination)

In September 2006 the Scottish Government introduced a national authorisation form for a post mortem examination. By law this is the only “consent” form that will be accepted. The authorisation form, together with two types of information leaflets and a summary form are contained in a distinctive dark blue sleeve, pale green for children and infants.

Current guidelines recommend that only senior medical staff should obtain authorisation. Junior doctors or ward staff should act as witnesses.

It is important that the authorisation form is completed correctly; otherwise the post mortem may not be carried out.

The nearest relative, or a nominated representative must be given the top (white) copy and the other two copies (pink and blue) are retained.

The form is a legal document and must not be altered without the relatives consent. Any changes must be made by having all three copies together and only writing on the top white copy to ensure that all forms are the same.

Small samples of tissue, for histological purposes only, will be retained in every post mortem to confirm macroscopic findings unless consent for this is withheld.

Detailed neuropathological examination of the brain is best done if the organ is first immersed in formalin for three weeks.

If the patient has died of a complex neurological disorder (e.g. MS, dementia, Parkinson’s disease) and it is considered that examination of the brain is very important, then specific permission to retain the brain after the post mortem should be obtained and noted in section 2A and 2B of the authorisation form.

If there is no nearest relative or nominated representative it is unlikely that a post mortem can be carried out.

In cases where there is an infectious risk to those handling the body after death (i.e. pathologists, mortuary technicians, undertakers) e.g. deaths from tuberculosis, AIDS, hepatitis B or C, etc, the body must be transported to the mortuary in a cadaver bag with ‘danger of infection’ stickers attached.

In cases of ‘bodies donated to medical science’ or any other issue contact the mortuary staff.

## Delivery of request authorisation form to the Pathology Department

Authorisation forms are available from the mortuary offices during working hours and from the booking in areas in every mortuary.

Wards should arrange for collection/delivery of authorisation forms together with the summary and case records. Do not use internal mail.

**All post Mortems will be carried out within the mortuary at the Queen Elizabeth University Hospital and all adult NHS post mortems are carried out on Tuesdays and Thursdays only.**

## Reporting autopsy findings

On completion of the autopsy the pathologist will contact the requesting clinician and where practical invite them to come and discuss the findings in the mortuary at their earliest convenience.

A preliminary autopsy report is despatched to the Consultant in Charge of the patient within three working days of the autopsy. Case notes are normally returned with the full PM report within 3-4 weeks.

Copies of the final autopsy report, which includes histological findings, are sent to the patient’s GP and hospital consultant usually within two weeks (but within a maximum of 28 days) of the autopsy.

## Fiscal post mortems

Deaths must be discussed with the procurator fiscal under the following circumstances:

1. Uncertified death.
2. Any death which was caused by an accident arising out of the use of a vehicle, or which was caused by an aircraft or rail accident.
3. Any death arising out of employment, by accident, industrial disease or poisoning.
4. Any death due to poisoning (coal gas, barbiturate, etc.).
5. Any death where the circumstances would seem to indicate suicide.
6. Any death where there are indications that it occurred under an anaesthetic.
7. Any death resulting from an accident in the home, hospital or institution or any public place.
8. Any death following abortion.
9. Any death apparently caused by neglect (malnutrition).
10. Any death occurring in prison or a police cell where the deceased was in custody at the time of death.
11. Any death of a new-born child whose body is found.
12. Any death (occurring not in a house) where the deceased’s residence is unknown.
13. Death by drowning.
14. Death of a child from suffocation (including overlaying).
15. Where a death occurred as a result of smallpox or typhoid.
16. Any death as a result of fire or explosion.
17. Any sudden and unexplained death.
18. Any other death due to violent, suspicious or unexplained cause.
19. Deaths of foster children.
20. Any complaint concerning care or treatment of the deceased noted by nursing or medical staff.

**Do not issue a death certificate until case is discussed with Fiscal.**

If the Fiscal decides to instruct a post mortem, the body will be removed to QEUH Mortuary. Fiscal post mortems are carried out 5 days per week.

## Request for pacemaker removal

A pacemaker must be removed from a body prior to cremation. This can be done by the technical staff in the mortuary at QEUH provided that written consent from relatives for removal and retention has been obtained and delivered to the QEUH mortuary prior to the body being released to the funeral director. This service is not generally available at other mortuaries. If the pacemaker has not been removed the MCCD **must** indicate that a pacemaker is in situ

## Examination of the Body by Clinician

Clinicians wishing to view remains should phone the mortuary staff to arrange a time to visit the mortuary.

**Contacts**

|  |  |
| --- | --- |
| Mortuary Operations Manager Mr William Scott | 0141 354 9351 |
|  |  |
| Mortuary contact numbers: |  |
| GRI  | 25519 |
| GGH  | 53368 |
| RAH  | 0141 314 6648 |
| IRH  | 01475 504 301 |
| VOL (Enquiries should be directed to QEUH mortuary)  | 0141 354 9357 |

##

# Electron Microscopy Service

The EM service is a highly specialised sub-division of Pathology and provides a diagnostic ultrastructural pathology services for both adult and paediatric cases including a national paediatric cilial service in addition to a regional and supra- regional service for renal, muscle and nerve.

Within the EM unit our main function is to undertake specialist specimen processing and analysis using a transmission electron microscope (TEM) to evaluate diagnostically significant pathological changes observed in diseased tissue at the ultrastructural level, the most significant of which are digitally captured to provide interpretative reports for the consultant pathologists as an aid to effective diagnosis and treatment.

## Location

The Electron Microscopy (EM) service is situated on the second floor (L2/B 086-090) of the Laboratory Medicine and Facilities Management Building located at the Queen Elizabeth University Hospital

## Laboratory Hours

9.00am- 5.00pm Monday-Friday (excluding public holidays) There is no out of hours service.

## Specimen Requirements

Specimens for electron microscopic analysis should ideally be no larger than 1 -2 mm 3 and placed into a vial of fresh 2% Glutaraldehyde fixative as soon as possible after specimen retrieval apart from blood/fluid specimens which must be discussed with EM unit directly.

Freshly prepared glutaraldehyde has a seven day shelf life and must be stored at 4ºC –

 8 ºC prior to use. This fixative is available with advance notice from the Electron Microscopy Unit, Pathology Department Level 2 Laboratory Medicine and Facilities Management Building, Queen Elizabeth University Hospital, 1345 Govan Rd, Glasgow G51 4TF.( 0141-354-9422)

Each specimen must be accompanied by a request form. Identification data including the patients CHI number, hospital number, first and surname, date of birth, nature of specimen, source including hospital and ward location and date and time of request must all be completed. The consultant and requesting doctor should also be included.

Due to the small specimen container size there is limited space for patient’s details but the patients CHI and first and surname must be provided on the specimen container.

A short clinical history must also be noted and please include any alerts to known or suspected danger of infection information to enable us to process and interpret the specimen appropriately.

Requests for urgent results should be clearly marked on the request form and contact telephone or page numbers provided. The consultant pathologist should be notified first by telephone, if an urgent result is required.

## Transport/ handling

Specimens for electron microscopy analysis should be delivered according to guidelines contained in the GG&C Transport & Disposal of Specimen Containers & Specimens Policy [PATH-SHARE-GGCPOL-006] to the Pathology Department Level 3 Laboratory Medicine and Facilities Management Building, Queen Elizabeth University Hospital, 1345 Govan Rd, Glasgow G51 4TF.

If specimens are sent through the post they must comply with post office regulations.

EM sampling from a histological wax block must be accompanied by a representative light microscopy slide.

All unused Gluteraldehyde should be returned to the EM unit for disposal.

## Specialist Advice

Advice is available from the Specialty Manager Alison Lupton 0141 354 9420 and the EM lab 0141-354-9422 or relevant Pathologist

## Results

In general, images for diagnosis should be available within 10-16 days once received in the EM unit for processing. This may change due to service provision. However there is provision to prioritise for clinical urgency with an accordingly reduced turnaround.

Sample results are affected by a number of factors including delay in fixation, use of inappropriate fixative / old fixative and incorrect sample size.

# Specialist Histology Services

Specialist Histology services incorporate Neuropathology, forensic medicine and Paediatric Pathology.

**Special techniques**: histochemistry, electron microscopy, immunohistochemistry, in-situ hybridisation, cilial beat frequency.

**Surgical biopsy pathology:** Histological and frozen section diagnosis of biopsy and resection specimens.

Histochemistry: Acetylcholinesterase histochemistry for diagnosis of Hirschsprung’s disease in rectal biopsies. This requires fresh, i.e. non-fixed tissue samples.

## Checking Completion of the Request Form and Confirming the Identity of the Patient

It is vital that full, correct patient details are given.

All sections on the appropriate biopsy or postmortem request form must be completed.

Please ensure that the correct Consultant’s name is stated on the generated specimen request. Failure to do so will cause the report to be sent to the wrong clinical team and may delay clinical decision making.

Searching by ward and hospital number to identify patients on Trakcare is safer than using surname and forename. Those having difficulty should approach the TrackCare Team for re-training.

Please note the information provided on the Pathology Request screen onTrakcare regarding the booking of frozen sections, Hirschsprung’s disease biopsies, renal biopsies, ciliary beat frequency analysis and the handling of tumour specimens.

Please ensure that all instances of paediatric neoplasia are notified to the Department in advance of submission and the specimens are submitted unfixed.

Check that the patient and request form details match. Use the patient’s wrist band whenever possible to confirm the patient’s identity.

After collecting the sample, write the time and date on the request form and sign.

The minimum data that must be detailed and legible on both sample and request form are: Surname, Forename (or Baby), CHI Number (Hospital Number if CHI not available), Date of Birth, Date and Time of Collection.

## Labelling Specimen Container

It is essential that the surname, forename (or baby), date of birth, CHI number (hospital number if CHI not available) and collection time and date are on each tube.

Use addressograph (patient) labels where possible

Where multiple specimens are being submitted, the site or other specimen description must be included on the container.
Check details are correct with HISS form or patient’s wristband.

**Preparation and Initial Handling of Sample**

The person collecting the sample should ensure that the patient is appropriately prepared

Be careful not to interchange samples.

Label tube as soon as specimen is put in, and BEFORE collecting next sample.

## Specimen Collection and Storage of Samples

Notify Specialist Histology (Tel. No. 89485) when frozen sections are required in order that the samples can be uplifted and transported for examination.

This also applies to fresh tumour samples and tumour resections. Where possible these must be sent in dry sterile containers.

The above specimens must not be fixed prior to examination by a Pathologist.

Specimens requiring electron microscopic examination should be placed in gluteraldehyde which should be requested specifically from the Pathology Laboratory (Tel. 89422) and returned along with any formalin fixed material as soon as the specimen is taken.

In the case of renal biopsies where electron microscopy is an integral part of the examination the selection of material for this purpose will be made by the Pathology Department staff.

N.B: Notify Specialist Histology (Tel. 89531) in the case of any renal biopsy in order that appropriate sampling can be undertaken by Pathology Department staff.

Routine surgical and biopsy resection specimens should be placed in formalin fixative ensuring that an adequate volume of fixative is present in each case, i.e., at least 10 times the volume of the specimen concerned. They can then be left in designated areas to await uplift by porters. Do not refrigerate.

## Safe Disposal of all Materials Used in Specimen Collection

Any sharps or scalpels, needles, etc. must be disposed of in the yellow sharps bin. Any biological material may be infective and must be disposed of as per the GG&C Health & Safety Policies: Prevention and Control of Infection Manual

## High Risk Specimens

Please ensure that all high risk specimens are clearly labelled

Under Health & Safety at Work Act 1984, all employees have a duty of care to patients, other staff and the general public. Any high risk samples must be appropriately packaged and labelled – known TB cases and gut pathogens can be highly infectious to other staff and samples need to be handled under specific conditions.

 See GG&C Health & Safety Policies: Prevention and Control of Infection Manual

**Paediatric Urgent Specimens**

**The following procedures must be followed** for all urgent paediatric fresh specimens including frozen sections, fresh tumour biopsies, fresh tumour resections and rectal biopsies.

Any queries regarding urgent specimens should be directed to the **duty Paediatric pathologist** by telephoning the paediatric office on 89478 and asking to speak to the **duty paediatric pathologist**. Any out-of-hours queries should be directed to the **on-call pathologist** who can be contacted via **hospital switchboard.** The paediatric laboratory may be contacted on 89531. The Paediatric Pathology consultants are: Dr Dawn Penman (#89485), Dr Clair Evans (#89538), Dr Amanda Murphy (#89497) and Dr Paul French (#89433).

**DISCUSSION WITH THE DUTY PATHOLOGIST – ALL CASES**

All cases must be booked in advance (ideally the day before) by telephoning 89478 and discussing the case and your requirements with the **duty paediatric pathologist**. Please provide patient details, including name and CHI number, date of surgery, approximate time of surgery and a contact number for theatre.

The surgeon or interventionalist performing the biopsy / resection must speak directly to the duty Paediatric pathologist **prior to the procedure** in every case to establish the specimen requirements. Failure to follow this procedure may render the biopsy un-interpretable.

The instructions below are general instructions and must not replace a case by case discussion with the duty pathologist.

* Tissue for frozen section should be kept dry and placed in a suitable container labelled with the patient’s details (ideally a small plastic dish wrapped in a yellow plastic bag). **Do not** place small biopsies on paper or wrap them in gauze or paper.
* Unless indicated otherwise by the day duty pathologist, all fresh tumour biopsies should be placed **in PINK tissue culture fluid** for transport to the laboratory.
* Unless indicated otherwise by the day duty pathologist, all fresh tumour resections should be kept dry and placed in a suitable container labelled with the patient’s details.

**TRANSPORT TO THE LABORATORY – ALL CASES**

All fresh paediatric specimens must be conveyed immediately in person or by porter to pathology (3rd floor, Laboratory Medicine Building). It is the responsibility of the surgical team to arrange urgent transport of the specimen to pathology. The sample must not be sent via the POD system and must be taken directly to pathology specimen reception on the 3rd floor. The specimen should be marked as **“Urgent. Frozen section.”** Staff transporting the specimen must inform specimen reception staff that it is an urgent fresh specimen for frozen section.

When the specimen leaves theatre, theatre staff must inform the laboratory by telephoning 89531.

**Paediatric Renal Biopsies**

**The following procedures must be followed** for all paediatric renal biopsies.

**DISCUSSIONS WITH THE DUTY PATHOLOGIST AND THE LABORATORY**

All Renal biopsies must be discussed with the Duty Paediatric Pathologist on 89478 as well as with laboratory staff on 89531 (see below).

These specimens will be collected in theatre by a biomedical scientist who will separate the sample for immunofluorescence and electron microscopy. Notification of such biopsies to the laboratory must be done as far in advance of the biopsy as possible by telephoning 89531. Failure to do so may result in delay since staff will have to be available to attend theatre to undertake this procedure.

 Native biopsies

 These specimens will be collected in theatre by a biomedical scientist who will separate the sample for immunofluorescence and electron microscopy. Notification of such biopsies must be done as far in advance of the biopsy as possible by telephoning 89531. Failure to do so may result in delay since staff will have to be available to attend the Royal Hospital for Children to undertake this procedure.

 Transplant biopsies

 These biopsies should be placed in formalin for transfer and may require a dedicated porter depending on the urgency. If indicated, the porter should be arranged by the renal team (theatre staff).

## Sample Spillage and Breakage

 Biological material spillage is a biohazard to the individual involved, and any others who come across it.

 The GG&C Health & Safety Policies: Prevention and Control of Infection Manual covers how to deal with such situations. Blood/other fluids must be wiped off the outside of tubes with medi-swab prior to sending sample to laboratory.

 All sites of specimen collection and transport personnel should have a Standard Operating Procedure to cover spillages.

## Specimen Transport

 Ensure the sample is in a sealed container. Place within the sealable plastic pocket and put in the relevant request form in the outer pocket of the specimen bag, to ensure confidentiality, folding form so details are not visible.

For specimens requiring immediate uplift (see above sections) the Pathology laboratory should be telephoned (85931)

 Routine specimens are uplifted from the various clinical units and operating theatres by Porters on a regular basis throughout the day and transported to the specimen hub where they are uplifted and transported to the QEUH Pathology Laboratory.

##

## Off site

 Transportation of specimens must be done in accordance with Department of Health Guidelines

 Samples being transported from outreach facilities should be placed within an individual sealed plastic pocket. They should then be placed in a secondary container for transporting to the laboratory following the guidelines contained in the GG&C Transport & Disposal of Specimen Containers & Specimens Policy [PATH-SH-GGCPOL-006]

# Placenta Histology Requests

Listed below are the data items that are required for pathological examination of placentas. Obligatory data items are in bold and the remainder should be added as required. Please include these data items on the pathology request form accompanying the placentas.

The placental request form can be ordered directly from Medical Illustration at GRI (for NHSGGC users) *Order code MIS260726.* Non NHSGGC users should contact the department who will supply a high quality PDF file by e-mail.

**Please write clearly on the forms**

* **Mother’s name**
* **Mother’s date of birth**
* **Address**
* **Hospital Number and CHI number**
* **Date of delivery**
* **Date placenta sent for pathology examination**
* **Referring Hospital**
* **Referring consultant**
* **Midwife or trainee doctor’s name and contact extension / bleep number**
* **Gravida and Parity**
* **GESTATION**
* **Apgars of the baby / babies delivered**
* **Weight of the baby / babies delivered**

**IUGR** (Intrauterine growth restriction)

**Liquor:** Polyhydramnios / oligohydramnios / anhydramnios / meconium staining

**Membranes:** PPROM / PROM /SROM

**Antepartum haemorrhage**

**Fetal distress**

**Maternal history:**

**Maternal pyrexia**

**Pre-eclampsia / eclampsia**

**Diabetes**

**Other thrombophilia**

Assisted conception (Clomiphene, IUI, IVF, ICSI etc)

Cervical incompetence

Thyroid disease

Other medical conditions / drug history Lupus

Placentation: Placenta previa / placental abruption / placenta accreta (including increta and percreta) etc

Delivery: spontaneous / induced, vaginal / forceps / ventouse / section

Presentation: vertex / breech / cord compression / cord prolapse

Infection risk: Cat 3 organisms or TORCH

Genetics: Amniocentesis / CVS / amnion

AFP (normal, low, high)

Ultrasound scan results

High vaginal swab: Has it been taken for microbiology / virology?

Dysmorphism of the baby

Fetal demise / perinatal demise: If the baby / fetus died when was the last evidence of life? Has a postmortem examination been requested

# Neuropathology

## Neurosurgical biopsies for intra-operative diagnosis (smear or frozen sections)

### Prior notification

All potential intra-operative investigations must be notified to the laboratory a minimum of 24 hours in advance of surgery via extension 89530 or by paging 17627. At booking, the patient name, CHI number, surgical procedure, location and estimated time of biopsy should be provided so that appropriate medical and laboratory staff cover can be arranged.

Failure to notify a case in advance of theatre may lead to delays in obtaining an

intraoperative report if staff have been allocated elsewhere.

Ideally all introperative cases should be discussed with a neuropathologist at the appropriate MDT meeting.

### Containers

Sterile, screw cap containers are kept in theatre. A limited supply of spare containers is kept in Specialist Histopathology.

All containers should be clearly labelled with patient name, date of birth, CHI number, ward number and consultant.

If a specimen is small, the specimen can be put on a glass slide within the container. Please do not add any fluid to the container.

**High-risk specimens must carry appropriate hazard labels.**

### Accompanying Information

Completed request forms should carry the consultant’s name, ward number, patient’s name, CHI number, address with post-code, date of birth, date of operation and relevant clinical information.

### Point of delivery

The specimen should be brought by the porter to the Pathology Department, Level 3 Laboratory Medicine and Facilities Management Building.

It is the clinician’s responsibility to arrange immediate transportation of a specimen to

Neuropathology.

**NB. The specimen must be handed to a member of Laboratory staff on delivery.**

## Neurosurgical biopsy for paraffin histology

### Prior notification

Not necessary

### Containers

Sterile, screw cap containers are kept in theatre. A limited supply of spare containers is kept in Specialist Histopathology.

All containers should be clearly labelled with patient name, date of birth, CHI number, ward number and consultant.

### Tissue Fixation

10% formal saline will be supplied by the Neuropathology section of the Pathology Laboratory when requested by theatre.

The container should be at least twice the volume of the specimen and filled with 10% formal saline.

**High-risk cases must carry appropriate hazard labels.**

### Accompanying Information

Completed request forms should carry the consultant’s name, ward number, patient’s name, CHI number, address with post-code, date of birth, date of operation and relevant clinical information.

### Point of delivery

Contact Staff on 0141 354 9530

## Muscle Biopsy

### Prior notification

Elective cases should be booked with the lab with as much notice as possible. The cases can be booked by contacting the neuropathology laboratory via 0141 354 9530 or through page 17627 or the appropriate consultant.

If there is a danger of infection, these cases must be discussed with medical staff before biopsy as the range of investigations which may be performed with these specimens is limited.

A service to receive specimens can be offered from 9.00h up to 16.00h. Specimens must be placed in a dry, clean universal container. No saline, gauze or formalin should be in the container.

(The muscle should be dropped into the container and the lid screwed on). The specimen should be transported immediately to Specialist Histology. If there is to be a delay of any longer than 20 minutes it is advisable to put the universal container (not the muscle directly) into a bag of ice.

All containers should be clearly labelled with patient name, date of birth, CHI number, ward number and consultant.

Universal containers must be placed in a specimen bag accompanied by a request card and [muscle biopsy request proforma.](http://www.nhsggc.org.uk/media/243606/muscle-biopsy-request-form.doc)

**High-risk cases must carry appropriate hazard labels.**

### Accompanying Information

A muscle biopsy request proforma and the completed request form must carry the consultant’s name, ward number, patient name, CHI number, address with post-code, date of birth, date of operation, relevant concise clinical data and the nature of the laboratory request. (Muscle Biopsy request proformas are available from the Pathology Lab. Tel. 0141 354 9530

### Point of delivery

Contact the muscle team on 0141 354 9530 or page 7627 who will advise on delivery of specimen.

**Further details for the submission of muscle biopsies can be found on the muscle biopsy request form which can be accessed via the departmental intranet site.**

## Nerve Biopsy

### Prior notification

Elective cases should be booked with the lab with as much notice as possible. The cases can be booked by contacting the neuropathology secretaries via 0141 354 9486 or through page 17627 or the appropriate consultant.

If there is danger of infection, these cases must be discussed with medical staff before biopsy.

A service to receive specimens can be offered to 16.00h. Specimens must be placed in a dry, clean universal container. No saline, gauze or formalin should be in the container. (The nerve should be dropped into the container and the lid screwed on). The specimen should be transported immediately to neuropathology.

If there is to be a delay any longer than 1hr it is advisable to put the universal container (not the nerve directly) into a bag of ice.

All containers should be clearly labelled with patient name, date of birth, CHI number, ward number and consultant.

Universal containers must be placed in a specimen bag accompanied by a request form.

**High-risk cases must carry appropriate hazard labels.**

### Accompanying Information

Completed request forms must carry the consultant’s name, ward number, patient name, CHI number, address with post-code, date of birth, date of operation, relevant concise clinical data and the nature of the laboratory request.

### Point of delivery

Discuss with staff on 0141 354 9530

**NB. The specimen must be handed to a member of Laboratory staff on delivery.**

## Results of Biopsies: Muscles and Nerves

### Routine Reports

Hard copy reports are issued, signed or electronically authorised by the reporting Consultant

and sent direct to the requesting consultant via the location stated on the request form.

Authorised reports are available via Clinical Portal.

### Urgent Results

These can be obtained by contacting a member of medical staff. If it is likely that the result will require to be telephoned back urgently, a contact number or page number should be provided on the request form.

### Telephoned Reports

Authorised reports will only be given to medical staff (or an appropriate deputy) directly

concerned with the treatment of the patient.

### Faxed reports

It is trust policy that no identifiable faxed reports are sent – if a faxed report is required then the Trust “Code of Conduct on Confidentiality of Personal Health Information” is followed. A secure fax is required. The recipient will be telephoned to check that they have been received.

### Expected Reporting Turnaround Times

* **Surgical Biopsy Within 7 working days.**

**In practice the majority of cases will be reported for or following discussion at the**

**appropriate MDT**

* **Muscle Biopsy Within 10 working days**

**If electron microscopy is required this will be issued as a supplementary report when completed.**

**In practice the majority of cases will be reported for or following discussion at the appropriate MDT**

* **Nerve Biopsy Within 10 working days**

**If electron microscopy is required this will be issued as a supplementary report when completed**

# Feedback

If you wish to discuss a report, please telephone the consultant whose name appears at the bottom of the report, in the first instance. The consultant will be happy to review the case and seek a further opinion within or out with the department as required.

The department aims to provide a first class service. If we have failed to meet your expectations, please do not hesitate to contact us, so that we can attempt to rectify the situation.

For general complaints/comments on the service please contact:

**Dr Gareth Bryson (Head of Service)** Tel 0141 354 9466

 e-mail: gareth.bryson@ggc.scot.nhs.uk

**Mr Paul Motley (Quality Manager)**

Tel 0141 354 9540, e-mail paul.motley@ggc.scot.nhs.uk

Departmental Complaints Procedure and the NHS Patient Confidentiality Policy are available via the departmental intranet site.

# Contacts summary

|  |  |  |
| --- | --- | --- |
| **Consultant Pathologists**  | **External**  | **Internal** |
|  |  |  |
| Dr G Bryson  | 0141 354 9562  | 89562 |
| Dr L Cooper  | 0141 354 9559  | 89559 |
| Dr S Dahill  | 0141 354 9503  | 89503  |
| Dr C Dick  | 0141 354 9508  | 89508  |
| Dr S Digby  | 0141 354 9544  | 89544  |
| Dr F Duthie  | 0141 354 9428  | 89428 |
| Dr C Evans  | 0141 354 9538  | 89538  |
| Dr S Fraser | 0141 354 9401 | 89401 |
| Dr P French | 0141 354 9561 | 89561 |
|  |   |  |
| Dr J Going  | 0141 354 9437  | 89437 |
| Dr C Harper  | 0141 354 9417  | 89417 |
| Dr Z Hanzely  | 0141 354 9533  | 89533 |
| Dr R Jackson  | 0141 354 9416  | 89416 |
| Dr D Kipgen  | 0141 354 9537  | 89537 |
| Dr G Kohnen  | 0141 354 9427  | 89427 |
| Dr P Konanahalli | 0141 354 1085 | 71085 |
| Dr M Laing  | 0141 354 9552  | 89552 |
| Dr J Loane | 0141 354 9575 | 89575 |
| Dr N Maka | 0141 354 1415 | 81415 |
| Dr EA Mallon  | 0141 354 9536  | 89536 |
| Dr L Melly | 0141 354 9539 | 89539 |
| Dr D Millan  | 0141 354 9563  | 89563 |

|  |  |  |
| --- | --- | --- |
| **Consultant Pathologists**  | **External**  | **Internal** |
| Dr A Milne | 0141 354 9573 | 89573 |
| Dr C Moyes  | 0141 354 9504  | 89504 |
| Dr E MacDuff  | 0141 354 9511  | 89511 |
| Dr D McLellan  | 0141 354 9557  | 89557 |
| Dr Karin Oien  | 0141 354 9436  | 89436 |
| Dr M Paul  | 0141 354 9543  | 89543 |
| Dr J Paxton  | 0141 354 9421 | 89421 |
| Dr D Penman  | 0141 354 9545  | 89545 |
| Dr V Phillips | 0141 354 9429 | 89429 |
| Dr H Pitchamuthu  | 0141 354 9507  | 89507 |
| Dr F Roberts  | 0141 354 9512  | 89512  |
| Dr J Salmond  | 0141 354 9419  | 89419  |
| Dr K Scott | 0141 354 9466 | 89466 |
| Dr M Seywright  | 0141 354 9510  | 89510 |
| Dr W Stewart  | 0141 354 9535  | 89535 |
| Dr S Syed  | 0141 354 9505  | 89505 |
| Dr C Van der Horst  | 0141 354 9553  | 89553 |
| Dr L Whyte  | 0141 354 9546  | 89546 |
| Dr S Wright | 0141 354 9558  | 89558 |

|  |  |  |
| --- | --- | --- |
| **General**  | **External**  | **Internal** |
|  |  |  |
| Dr Gareth Bryson - Head of Service  | 0141 354 9466  | 89466 |
| Mrs Jackie Walker - Head of Technical Services  | 0141 354 9469  | 89469 |
| Mr Steven Harrower - Service Manager  | 0141 354 9468  | 89468 |
| Mr Paul Motley - Quality Manager  | 0141 354 9540  | 89540 |
| Mr Willie Scott - Mortuary Services Manager  | 0141 354 9351  | 59351 |
| Bio-repository Office  | 0141 354 9490  | 89490 |
| Mr Mark Wilson - Office Manager  | 0141 354 9568  | 89568  |
| Histology Specimen Reception  | 0141 354 9513/4  | 89513/4  |
| Cytology Specimen Reception  | 0141 354 9524  | 89524 |
| EM Enquiries  | 0141-354-9422  | 89422 |
| SCRRS Enquiries  | 0141 354 9524  | 89524 |

# Specialist Referral Centres

Bone tumours are double reported by referral to other specialist centres including:

Royal Infirmary of Edinburgh CPA Ref: 1378

51 Little France Crescent

Edinburgh

Lothian

EH16 4SA

Aberdeen Royal Infirmary CPA Ref: 0857

Foresterhill

Aberdeen

Aberdeenshire

AB25 2ZD

 All referral centres are subject to review on an ongoing basis.

N.B. Compliance Manager/ IT Manager must be notified of any changes to this document so that the Departmental website link can be updated.