Cellular Pathology

The cellular pathology department provides a comprehensive service in general histopathology, neuropathology, paediatric and perinatal pathology and diagnostic cytopathology. Included in the department are the mortuary and the biomedical imaging unit.

The department is integrated with the University of Southampton's department of pathology which has a major role in medical student education, and has active research programs in both applied and basic experimental pathology. The department has an important role in the training of junior histopathologists and biomedical scientists. The department is a major referral centre and the consultant pathologists each specialise in one or more area of pathology. Regional departments of paediatric and perinatal pathology and neuropathology are based in the department. The laboratory is recognised by the Institute of Biomedical Science (IBMS) for training.

Key contacts

Results and General Enquiries:

Histopathology: Neuropathology: Paediatric pathology: Cytopathology:	cellpath@uhs.nhs.uk	023 8120 6443
Cytology FNAs & clinics at SGH Bleep:		2968
Mortuary:	mortuary@uhs.nhs.uk	023 8120 6306
Biomedical Imaging Unit:	biu@uhs.nhs.uk	023 8120 4807
Dr Rushda Rajak, Joint Clinical Lead:	Rushda.rajak@uhs.nhs.uk	
Dr Leon Veryard, Joint Clinical Lead:	Leon.veryard@uhs.nhs.uk	
Dr Mark Walker, Joint Clinical Lead (Paeds & Neuro):	Mark.walker@uhs.nhs.uk	

About our services

Histopathology

The histopathology section offers a histological and immunohistochemical diagnostic service for the Wessex region. Discussion and advice on clinico-pathological correlation and therapeutic implications is readily available to all medical staff in both hospitals and in general practice.

Neuropathology

The neuropathology section offers a specialist tissue diagnostic service for diseases of the brain, spinal cord, nerves, muscle and eyes for the Wessex region. Discussion and advice on clinico-pathological correlation and therapeutic implications is readily available to all medical staff, both in hospitals in the region and in general practice.

Cytopathology

Diagnostic cytology includes a wide range of fine needle aspirations, endoscopic brushings and other exfoliative cytology specimens received from clinical directorates and General Practitioners. The Cytopathology department also offers rapid cytological diagnosis for the ENT clinic, Endoscopic Ultrasound clinics for Gastrointestinal, Pancreatic and Bronchial diseases, and for the Thyroid clinic at Southampton General Hospital (SGH).

Paediatric and Perinatal Pathology

The paediatric and perinatal pathology section offer a Consultant lead service to UHS and other local Trusts. This includes specialist reporting of diagnostic samples from children and a full perinatal/paediatric post mortem service to both local and regional hospitals.

Mortuary

The Mortuary serves UHS and also acts as the public mortuary and provides a service to HM Coroner for Southampton and the New Forest. It has special facilities for paediatric/perinatal pathology and a dedicated containment area for dealing with high risk / infectious cases.

Biomedical imaging unit

The Biomedical Imaging Unit is a multi-disciplinary research and diagnostic facility jointly managed by Cellular Pathology and the University of Southampton. It provides transmission and scanning electron microscopy, X-ray microanalysis, X-ray micro

CT, confocal laser scanning microscopy, spatial biology and image analysis services.

Service hours

All sections are open between 6.00am and 6.00pm, Monday to Friday, 7.00am to 5.00pm Saturday and bank holidays (excluding 25th, 26th December). Please note there is no pathologist service on Saturdays and bank holidays. Additional out of hours services can be contacted via the operator on extension 100 or 02380777222.

Quality management

The department of cellular pathology will comply with the standards set by UKAS and the Human tissue Authority, and is committed to:

- Staff recruitment, training, development and retention at all levels to provide a full and effective service to its users.
- The proper procurement and maintenance of such equipment and other resources needed for the provision of the service.
- The collection, transport and handling of all specimens to assure quality of performance of laboratory examinations.
- The use of examination procedures that will ensure the highest achievable quality for all tests performed.
- Reporting results of examinations which are timely, confidential, accurate and clinically useful .
- Assessment of user satisfaction, in addition to internal audit and external quality assessment to produce continual quality improvement.

For a detailed list of tests for which the department is accredited to ISO15189 standards please refer to: https://www.ukas.com/wp-content/uploads/schedule_uploads/00007/8178-Medical-Mulitple.pdf

New tests

Please note, new tests will not be accredited until they have an extension to scope assessment.
As of January 2024 the department has introduced new staining machines for Haematoxylin and Eosin.

The department is currently developing a digital pathology service, which will enable reporting on digitally scanned slide images. This will also create opportunities for learning and collaboration with other digitised cellular pathology services. The service has undergone a thorough validation & clinical safety assessment and staff are currently being trained. The service will be live from July 2024.

User satisfaction and complaints

In order to help improve service, we may ask you to complete a questionnaire. The value of the information obtained from these surveys is appreciated, and advanced thanks is offered in anticipation of your assistance in completing them. For ways to feed back or get involved with patient groups, please visit the website here.

The department welcomes constructive comments on any aspect of it's services. A Quality Manual describing all aspects of our Quality Management system is available for inspection by users on request.

Information on how to raise a complaint and the handling concerns and complaints policy can be found here:
https://www.uhs.nhs.uk/contact/tell-us-about-your-experience/raising-concerns-or-making-a-complaint

Consent

Please see the following document available on the UHS website:
http://staffnet/TrustDocsMedia/DocsForAllStaff/Clinical/Consentpolicy/ConsentPolicy.pdf

Patients attending adult venesection services will be asked to give verbal consent prior to blood specimens being collected.

Availability of clinical advice

Consultants within each discipline are available to provide help with the interpretation of results and other clinical advice. Please refer to 'Key Contacts'.

Quality assurance

All histopathologists take part in one or more EQA schemes applicable to their scope of practice (including but not limited to general histopathology, neuropathology, paediatric, liver, skin, urological, gastrointestinal, head and neck, urological, lung, lymphoma and breast pathology).

The laboratory participates in technical EQA schemes for the region. The laboratory is signed up to several technical UK NEQAS schemes covering histopathology, diagnostic cytology, immunohistochemistry and transmission electron microscopy as well as interpretive schemes for crystal analysis in synovial fluids and

immunohistochemistry markers. A full list of EQA schemes can be obtained on request.

Regular clinico-pathological meetings are held with clinicians from the different specialties, at which pathologists with a specialist interest in the field concerned review and discuss selected cases in the presence of the clinical and radiological teams.

Completion of request forms

A completed request form **must** accompany all specimens. This must clearly identify patient, specimen type, requesting clinician / GP and source of the request (ward, clinic, surgery). The date taken and where extra copies of the report should be sent should also be recorded. The request form will be handled by staff outside the laboratory area so must be free of contamination by blood or body fluids.

The spelling of names must be correct, with matching details clearly presented on both the specimen and the request form. Specimens that do not meet these requirements cannot be processed by the laboratory until the correct details have been provided by the requesting doctor which will lead to delayed processing of specimens. The requesting doctor will be asked to resolve any issues that arise from incorrect completion of patient specimen/request form details and sign to accept responsibility for identification of the specimen.

It is the responsibility of the requesting clinician to ensure that the clinical details section contains complete and accurate clinical information. This should include relevant clinical history, examination findings and radiological and laboratory results.

As of November 1st 2020 all histopathology requests from UHS clinicians should be completed using eQuest. Handwritten requests may be rejected by specimen reception and acceptance of the request will be at the discretion of the speciality pathologist on the day the request is received.

When multiple specimens are taken from the same patient it must be clear which specimen on the request relates to which pot and the specific site from which it was taken. When labelling specimens, sequential letters may be used to clearly identify them (A,B,C…etc.). For eQuest specimens, please create a separate specimen for each pot so a label can be generated. The patient and specimen details must be on the pot itself and not just the lid of the pot.

Please note: Due to the setup of the laboratory information management system the maximum number of pots that can be booked in under one specimen number is 23; if you have more than 23 pots these will need to come in on multiple requests.

The importance of accurate and correct labelling, and presentation of samples, cannot be overemphasised - the laboratory may not be able to process

samples received without compliance with the full requirements (see below) without which this could result in the sample having to be disposed.

Specimens may be rejected (and therefore potentially delay reporting) if the following criteria are not met relating to the labelling of the sample and the request form:

	Essential	Desirable
Sample	1. NHS or Hospital number* 2. Patients full name or unique coded identifier 3. Date of birth 4. Patient Identification label MUST be attached to the sample container, NOT just on the lid.	5. Date and time 6. Nature of sample, including qualifying details, e.g. left, distal etc especially if more than one sample per request is submitted
Request Form	1. NHS or Hospital number 2. Patient's full name or unique coded identifier 3. Date of birth 4. Gender 5. Patient's location and destination for report 6. Patient's consultant, GP or name of requesting practitioner 7. Investigation(s) required	8. Clinical information including relevant medication (which is sometimes essential) 9. Date and time sample collected (which is sometimes essential) 10. Patient's address including postcode 11. Practitioner's contact number (bleep or extension)
Other Required Acceptance Criteria	1. The number of specimens outlined on the form must match the number of specimens received. 2. Specimen received with same details to request card 3. POC specimen must have two copies of the consent form (white and blue) and an application for cremation form.	

*Use of NHS number of paper/electronic patient records is mandatory requirement included within the NHS Operating Framework 2008/9

Identification of high-risk specimens

For the protection of laboratory staff the request form and any specimens collected from patients **with known or suspected infection** due to a **Hazard Group 3** biological agent must be labelled as **'High Risk'**. It is the duty of the clinician to inform the laboratory if the patient is high risk. Please note that any specimens which are known to be potentially dangerous of infection may not be rapidly processed and may require prolonged fixation in formalin. The staff completing the respective request form have a duty of care to everyone to ensure that all / any risks the samples present are clearly indicated within the request form. These agents include:

- Human Immunodeficiency Virus (HIV) 1 and 2
- *Salmonella typhi / Salmonella paratyphi*
- Hepatitis B virus (HBV)
- Hepatitis C virus (HCV)
- *Mycobacterium tuberculosis*
- Human T Lymphotropic Virus (HTLV) 1 and 2
- *Brucella sp.*
- COVID-19

and the causative agents of:

- Anthrax
- Creutzfeldt-Jakob disease
- Rabies
- Yellow Fever
- Plague

Histopathology

Availability of results

UHS: results are available via E-Quest once authorised and printed copies are sent to the source.

General Practice: results are available either electronically or by printed copy.

Post mortem results: a preliminary cause of death is sent by FAX and a full post mortem report follows later as a printed copy.

Please note that any caller's identity must be confirmed before giving results over the telephone. We are unable to give results directly to patients or their relatives.

Results are available on E-Quest when they have been authorised by the reporting Consultant Histopathologist. Preliminary results may be available by discussion with the Consultant Histopathologist.

Biological reference intervals and clinical decision limits

Immunohistochemistry is assessed by the reporting pathologist in the presence of appropriate positive and negative control material as required. For predictive/prognostic immunohistochemistry, reporting will include a numerical score where appropriate, with reference to the latest published evidence in terms of relevant scoring system(s), professional guidelines, and clinical trial data. Please contact the reporting pathologist and/or cellular pathology department if further information is required.

Turnaround times

The locally agreed target for UHS Cellular Pathology is that at least 75% of specimens should be reported within 10 calendar days (August 2016).

The Royal College of Pathologists, in their document "Key performance indicators – proposals for implementation - July 2013 " state *"provisional expectations are that 80% of cases would be reported within seven calendar days and 90% of all cases are reported within ten calendar days."* The UHS Cellular Pathology department will continue to strive to deliver the RCPath proposal.

Within these guideline periods, the time taken for a result to be available varies depending upon the type, size and complexity of the specimen as well as the clinical urgency (see below).

Please note that certain specimen types (those including bone or nail) may take longer to process and the turnaround time target may not be attained for these particular specimen types

The UHS Cellular Pathology department formally audits specimen turnaround times against both the local and RCPath benchmarks on a weekly and monthly basis.

Cases requiring prolonged periods of decalcification fall outside the guidelines, as do cases sent for external reporting/expert opinion or specialist testing. Complex specimens may also require additional time for reporting.

Locally agreed TAT for dermatology specimens

The department has a local agreement for dermatology specimens as follows:

Specimen type	Proposed TAT
24 hour skins	100% in 24h
48 hour skins	100% in 48h
72hr urgent biopsies	100% in 72hr
Periorbital rapid paraffins (oculoplastic)	100% in 5 days

One-week turnaround times (from derm or OMF/ENT) (e.g. SCC/BCC excision, wound left open pending pathological assessment of margins)	
Melanocytic lesions - e.g. ?MM/DN (biopsies or excisions) Biopsies for ?SCC ? AFX/PDS/sarcoma ? MM	90% in 14 days
All other specimens (e.g. BCCs, benign cysts, lipomas etc.)	75% in 21 days

Urgent specimens / 2 week wait pathway patients

Specimens that require urgent reporting (<7 days) must be delivered to the laboratory as soon as possible after the sample has been obtained from the patient. Contact details of the requesting clinician should be clearly indicated on the request form. The patient request form should be appropriately flagged as urgent to alert the laboratory team. Please include helpful information eg. dates of urgent follow up clinic appointments or surgical reconstruction dates, wherever possible.

In the event of **very urgent patient samples** please telephone and/or email the Cellular Pathology Department to liaise directly with the appropriate subspecialist consultant pathologist (Tel: 023 8120 6443). More rapid processing of very urgent small specimens may be arranged following discussion with the appropriate pathologist, enabling a preliminary result to be available 24-48 hours from the sample being obtained in straightforward cases. However, rapid processing may not be available on tissue known to be danger of infection (see above).

Urgent results of FNA cytology and same day results for other cytology specimens may be available by special arrangement with the laboratory.

Cases where the microscopic findings are considered by the reporting histopathologist to be of clinical urgency may be communicated to the clinical team by telephone and/or email.

Intra-operative Consultation (Frozen section) Service

Predictable requests for frozen sections must be arranged in advance by telephoning the laboratory (ext. 8966 for neuropathology, ext. 4879 for histopathology) and giving details of the patient, theatre and operative procedure. This should take place as soon as the patient is booked for theatre. All

Consultant Pathologists have duties in many locations in the hospital and it is important that they are informed of potental frozen section requests so thay can be available to deal with the samples. Unpredictable requests should be telephoned to the same numbers as soon as the requirement for frozen section diagnosis is realised. Fresh tissue must be dispatched by theatre / hospital porter for immediate delivery to the laboratory on Level E, South Block, SGH. Request forms should be clearly labelled 'FROZEN SECTION' and the contact telephone number for delivery of results should be clearly stated. The department aspires to report a frozen section within 30 minutes of receipt however the overall TAT depends upon the complexity of each case. We treat every case requiring frozen sections with the utmost ugency.

Mohs micrographic skin surgery

UHS Cellpath laboratory provides support to the Dermatology Mohs skin clinics held in the Max-fax unit on level C of the main hospital.
Mohs micrographic surgery is mainly used for the treatment of basal cell carcinoma (BCC). Indications for Mohs include tumours occurring on the face where a good cosmetic result is required, BCCs that are difficult to see or where there has been a recurrence.
All patients are booked through Dermatology for a ‘one-day’ clinic.
The lesion is removed and checked for tumour under the microscope, if present then a further piece is removed until no tumour remains.
The laboratory provides at least one trained Biomedical scientist for each session. Their role includes handling and orientation of sample, embedding, cryo-sectioning, staining and QC of all skins.

Unexpected findings

The Royal College of Pathologists has set out guidance for the communication of critical and unexpected results.

‘Pathologists should consider the following examples of situations in which results might need to be communicated urgently to clinicians, outside the normal parameters for the electronic delivery of laboratory results.

1 Cases where there is a predictable degree of urgency. Such cases would include intraoperative frozen sections, some medical renal biopsies and some biopsies from organ transplant patients where prompt assessment according to local protocols will determine the management of the patients.

2 Cases unexpectedly found to be infectious. The clinical implications and severity of the infection, risk of transmission of infection to staff, other patients and the public, and the need for immediate contact tracing should be considered by the reporting histopathologist. Consideration should also be given as to whether or not the condition is a notifiable disease.

3 Expected malignancy case where no malignancy is found in the specimen. Frequently this will result in extra sections and/or levels being examined by the reporting pathologist. The requesting clinician may benefit from a warning that further laboratory work is underway and may be able to provide additional relevant clinical history. If no malignancy is found at the end of a thorough histopathology search, there may be cases where the possibility of a wrong site surgery never event should be considered. Such cases should be discussed with the requesting clinician in the first instance.

4 Biopsy or removal of an unexpected organ. This is important to communicate immediately to ensure clinical follow up for unexpected clinical complications and repeat biopsy of the correct organ. Please note, some organs are regularly biopsied en passant, e.g. rectal mucosa in transrectal ultrasound biopsies of the prostate; this does not constitute an unexpected finding as covered by this guidance.

5 Unexpected finding of malignancy. This is important where the case would not routinely be scheduled for multidisciplinary meeting discussion and there is a risk that the histopathology report may be missed by the requestor. An example of this would be a melanoma removed by a GP who anticipated that the lesion was a benign lesion.

6 Findings that trigger a particular referral pathway. An example of this would be molar pregnancy identified in products of conception.'

Further guidance can be found at:
https://www.rcpath.org/uploads/assets/bb86b370-1545-4c5a-b5826a2c431934f5/The-communication-of-critical-and-unexpected-pathology-results.pdf

Out of Hours service

There is no Out of Hours Service provided by the Consultants in Cellular Pathology.
The Cellular Pathology Laboratory provides an out of hours service for:
1) Receiving of specimens for rapid processing
2) Receiving of specimens for the sampling of fresh tissue (genetics, freezing etc)
In the event of the clinical need for rapid processing out of hours then the following steps should be taken:
1) The Clinical Consultant should discuss the case with the on call Biomedical Scientist so that the optimum sample may be obtained and the optimum processing schedule be followed.
The Cellular Pathology technical out of hours service can be contacted via the operator on extension 100 or 02380777222.

Specimen collection

If service users are in any doubt as to how to present a particular sample to the Cellular Pathology laboratory for analysis then it is vital to contact either the laboratory directly or the on-call Biomedical Scientist to avoid inappropriate treatment compromising the sample. Details can also be found in the Transport of pathology specimens by transport services/portering services guidelines, found on Staffnet.

The tissue fixative used routinely is 10% neutral buffered formalin (formaldehyde). Exceptions are listed in the table below:

Specimens for routine histopathology / neuropathology	Formalin
Specimens for frozen section	Fresh
Muscles and nerves	Fresh
Electron microscopy	Glutaraldehyde
Skins for immunofluorescence studies	Fresh or in Michel's solution or wrapped in saline soaked gauze. It is recommended that a sample may be in Michel's solution for a maximum of 7 days.
Rectal biopsies for ? Hirschsprung's disease	Fresh
Lymph nodes for genetic marker studies	Fresh

Tissue samples should be placed in to 10% Neutral Buffered Formalin solution fixative as soon as possible after removal from the patient. Details as to where to obtain sample containers and this reagent can be obtained from the laboratory.

With small biopsies in particular, it is vital not to let the specimen dry out. The recommended volume of fixative is minimum of ten times the volume of the specimen, it is therefore important not to squeeze specimens into small containers. If in doubt, choose a larger container as poor fixation will hinder or prevent accurate histological diagnosis. Fresh and urgent specimens must be clearly marked as such. **A 'DANGER OF INFECTION' sticker must be applied** to all specimens known to be an infection hazard.

Opening or dissecting excised specimens before it is sent to the department must be resisted. Subsequent fixation of a partly incised specimen may cause distortion and hinder anatomical orientation. In the case of excised tumours, it may then be impossible to identify surgical planes of excision.

Containers of formalin must be securely closed and users are recommended to read the Trust policy on the *transport of specimens*. Formaldehyde vapour is a well-

recognised respiratory irritant, so skin contact with formalin solution must be avoided, as repeated exposure may cause dermatitis in some individuals.

Fresh specimens

It is desirable for some types of specimen to be delivered in a fresh state (without fixative) to the laboratory. The laboratory should be given advance warning of the delivery of such a specimen (023 8120 4879 / 3768) so that staff are prepared for the arrival. If such a specimen is expected to arrive out of normal working hours then the duty Biomedical Scientist should be contacted via the hospital switchboard.

The following specimens may be sent fresh (unfixed):

Lymph node biopsies and spleens

These should be sent FRESH for genetic marker studies. The laboratory must be notified in advance and the specimen transport bag labelled 'URGENT SPECIMEN - DELIVER IMMEDIATELY TO HISTOPATHOLOGY LABORATORY'. Contact the lymphoreticular pathologists regarding these specimens (ext. 6443).

Lungs

Fresh lungs should be sent to the laboratory in a labelled plastic specimen container (dry) double sealed in plastic bags.
The laboratory must be notified in advance and the specimen transport bag must be labelled 'URGENT SPECIMEN - DELIVER IMMEDIATELY TO HISTOPATHOLOGY LABORATORY'.

Skin biopsies for immunofluorescence

These sample should always be presented to the laboratory fresh between 0900 and 1630 and clearly labelled for IMF testing.
All fresh specimens must be clearly labelled as such and sent immediately to histopathology – **any delays in transportation will severely compromise the integrity of the sample(s). If sending a sample in Michel's medium please ensure the sample arrives within 7 days. Please note the laboratory no longer provides Michel's medium.**

Rectal biopsies ? Hirschsprung's disease

The paediatric pathologist must be contacted in advance (ext. 6443). Fresh specimens must be labelled FRESH / URGENT and sent immediately to the laboratory. Where intra-operative frozen sections are required the paediatric pathologist, Dr Bhumita Vadgama (ext. 4502), must be contacted in advance.

Frozen section - eye or skin biopsies

Requests should be made in writing well in advance to a Dr Vidhi Bhargava (ext. 6664). The tissue should be dispatched by theatre / hospital porter for immediate delivery to the laboratory, Level E, South Block, SGH.

Specimens for frozen section should be sent fresh. The request form should be clearly marked FROZEN SECTION and should include a telephone / bleep number to be used for telephoning the result.

Renal biopsies

The renal service is provided by Professor Ian Roberts, Oxford.

Instructions for other specimen types (fixed):

Colonic mapping biopsies

Endoscopic mapping biopsies should be attached to a strip of Millipore (nitrocellulose) filter before fixation. The biopsies should be arranged in order in a single row as close together as possible. Cut off a corner of the filter strip to indicate the first biopsy. A diagram should be stamped (or drawn) on the request form to indicate the site and number of each biopsy. A detailed procedure is available from the laboratory (ext. 4879).

Special diagnostic biopsies

Contact the appropriate pathologist when the selection of tissue requires special consideration or fixation, or the biopsy is of special interest or difficulty.

Products of conception

Products of conception (POC) specimens that require cremation after processing must be accompanied by both a 'permission form' and an 'application for cremation' form. The legislation surrounding this is very stringent, and the forms need to be signed and completed with care, **the department can not accept these specimens if the correct documentation is not provided**. The processing of these samples will be delayed until the consent has been received. Forms can be obtained from the Princess Anne Hospital (PAH).

For POC specimens requiring genetic testing, please send directly to Salisbury.

Time limits for requesting additional information

Formalin fixed wet tissue is stored for six weeks after authorisation of the report, before being disposed.
Histological slides are stored for at least 13 years.
Paraffin wax blocks are stored for a minimum of 15 years.
Diagnostic Cytology samples are retained for 3 days after authorisation of the report.

Requests for additional investigations should made after discussion and agreement with the reporting Consultant Histopathologists.

Referred tests / laboratories

A list of referral laboratories used by the department is available by contacting the department. Any specimens/slides referred off site will be referenced within the report.

Neuropathology

Frozen sections

Predictable requests for frozen sections must be arranged in advance by telephoning the laboratory (ext. 8966 for neuropathology) and giving details of the patient, theatre and operative procedure. This should take place as soon as the patient is booked for theatre. All Consultant Pathologists have duties in many locations in the hospital and it is important that they are informed of potental frozen section requests so they can be available to deal with the samples. Unpredictable requests should be telephoned to the same number as soon as the requirement for frozen section diagnosis is realised. Fresh tissue must be dispatched by theatre / hospital porter for immediate delivery to the laboratory on Level E, South Block, SGH. Request forms should be clearly labelled 'FROZEN SECTION' and the contact telephone number for delivery of results should be clearly stated. Neuropathology frozen section service provides frozen section slides as well as smears from the fresh tissue. A consultant neuropathologist is responsible for the handling and orientation of the sample, as well as the preparation of smears. A biomedical scientist is responsible for embedding cryo-sectioning, staining of frozen sections and smears and QC of the neuropathology frozen. The department aspires to report a frozen section within 30 minutes of receipt however the overall TAT depends upon the complexity of each case. We treat every case sent for frozen sections with the utmost ugency.

Muscle and nerve biopsies

The clinical details for muscle and nerve biopsies should be discussed with a Neuropathologist by writing / e-mail / telephone before the biopsy is taken. Technical and logistic details for taking muscle and nerve biopsies should be discussed with the laboratory in advance (ext. 4882).

Muscle and nerve biopsy specimens **MUST** be sent fresh **NOT** in saline and should be clearly marked for attention of Neuropathology.

All muscle biopsies must be accompanied with the completed form LF 120 075 – U.H.S MUSCLE BIOPSY REQUEST CHECKLIST, which can be downloaded from the following location:
http://www.uhs.nhs.uk/HealthProfessionals/Extranet/Services/SUHTPathologyServices/Handbook/CellularPathology.aspx

Enucleated globes, evisceration specimens, corneas and orbital exenteration specimens should be fixed in 10% neutral buffered formalin. The request should be marked for Neuropathology.

Cytopathology

Non-gynaecological specimens

Slides where produced must be labelled with patient surname, forename and DOB. These details should be written on the frosted edge using pencil. Slides should be transported in slide boxes which should have an E-quest label applied to the outside. If a fluid is collected, then the specimen container should be labelled and all required fields completed to match the patient with the request form and laboratory database and specify collection date/time and requesting source.
Unlabelled or wrongly labelled specimens must be corrected by the originator of the request i.e. we will ask you to come to the department to correct the details and may even lead to non-invasive samples being discarded if it is considered the risk is too high.

Endoscopic brushings

Material should be gently rolled onto one or two slides and generously spray fixed without delay.

Fine needle aspirates

Assistance is available at SGH for FNAs - either to perform the aspirate or prepare the slides. Contact the SGH laboratory (Ext. 6443 or Bleep 2968).

Urine cytology

A 25ml sample, not an early morning specimen, should be forwarded to the laboratory without delay in a sterile bottle. The request form should state time, date of collection and whether it was a catheter or post cystoscopy specimen.

Cyst fluids, washings

Fluid should be collected into a sterile bottle and forwarded to the laboratory without delay. Do not use powdered gloves when collecting synovial fluid as this may contaminate the specimen.

Serous fluids

Fluid should be collected into a sterile 25ml bottle. A second bottle of fluid if available will allow for further cytological investigations if required. Do not send large volumes of drained fluid or drainage bottles

Sputum

An early morning deep cough specimen should be collected into a sterile container and sent without delay. Send each specimen as soon as it is taken. Sputum cytology has low sensitivity and specificity for the diagnosis of bronchial carcinoma.

Skin scraping

Smear the scraping onto a slide and fix immediately with Cytofix, obtained from the department.

Biomedical imaging unit

Specimens for examination under the electron microscope should be discussed with the appropriate pathologist. Special fixative containing glutaraldehyde and advice regarding fixation methods can be obtained from the Biomedical Imaging Unit (ext. 4807).

Mortuary

The mortuary acts as both the Southampton Hospitals and Public mortuary providing a service to HM Coroner for Southampton and the New Forest. It has class leading specialist facilities for both Paediatric pathology and a specific specialist and Category 3 rated post mortem suite for all high risk/infectious other cases.

ALL deceased transferred to the Mortuary from wards MUST have identification bracelets attached to the wrist and ankle. The information on the ID bracelet should include: full name, hospital number and date of birth. The mortuary staff **MUST** be informed of any infection or radiation risk. All ICD/Implants must be recorded on the Notice of Death record sheet accompanying every patient. A deactivation/active record must also be recorded.

Referral centres who wish to facilitate the transfer of a deceased to this department must first contact the mortuary with full patient details and agree authorisation/pertinent/specific case criteria that may require additional Operations manager and pathologist consultation. This discussion will include the agreed

admission and subsequent date/time collection details prior to the transfer being undertaken.

Hospital post mortems

If the cause of death is known but a post mortem examination is required for medical interest purposes, then consent must be obtained from the person who is ranked highest in the list of those in the hierarchy of 'qualifying relationships' (Human Tissue Act, 2004). If the cause of death is not known the Coroner's Officer must be contacted on 01962 – 667884 to discuss the case.

Written consent for a post mortem must be obtained by a member of the medical staff caring for the patient, together with a member of the Bereavement Care Team.

Reporting deaths to H.M. Coroner

Any death which falls under the following criteria MUST be reported to the Coroner's Officer. The Coroner will either arrange for a post mortem examination to take place, open an inquest, or ask you to complete the Medical Certificate of Cause of Death, depending upon the circumstances.

- When death is known to be connected with crime or suspected crime, suspicious circumstances or suicide.
- When the medical practitioner cannot certify death because he / she has not attended the deceased in his / her last illness.
- When the medical practitioner did attend the deceased in his / her last illness but did not see the deceased after death or within 14 days before the death.
- When the cause of death is uncertain or sudden, i.e. no last illness, unnatural or unexpected.
- When the death occurs during an operation or before the recovery from the effects of anaesthetic.
- When the death occurs within 12 months of an operation.
- When the deceased has a fracture or injury.
- When a contributory cause of death is:
    - Alcohol poisoning - chronic or acute
    - Accidents or injuries
    - Violence
    - Drugs
    - Unexplained death of a young person
    - Industrial disease or pathological condition arising out of the deceased's employment
    - Poisoning from any cause - i.e. occupational, food, accidental
    - and abortion
- When the deceased is:
    - A foster child
    - A service disability pensioner

- A reputed stillborn child where there is suspicion that it was alive at birth
- A patient detained under the Mental Health Act (1983)
- In legal custody - prison, borstal or detention centre

HM Coroner contact information:

Coroners Office
Southampton & Western Hampshire
Castle Hill
The Castle
Winchester
SO23 8UL

(Main) Telephone Number:	01962 - 667884
Fax Number:	01962 - 667893
Email:	hampshirecoroners@hants.gov.uk

This Coroner's Office is responsible for the administrative areas of:
Area A
- Winchester City Council
- Test Valley Borough Council
- Eastleigh Borough Council

Area B
- Southampton City Council
- New Forest District Council

Checklist for reporting deaths to H.M. Coroner

If a death is to be reported to H.M. Coroner the following procedure should be followed:

1. Telephone the Coroner's Officer on 023 8067 4266. Outside normal working hours the on-call Coroner's Officer details can be obtained via the Hospital at Night team or the duty manager.
2. Give the Coroner's Officer details of the death (the Coroner's Officer requires a factual account of the clinical sequence and the parts played by the medical practitioner and other healthcare workers).

NOTE: The Coroner's Officer must be made aware of any infection risk.

Viewings

Core hours:

Monday - Friday 10.00am to 12noon; and 2.00pm to 4.30pm

Out of hours:
Monday - Friday 5.00pm to 6.45pm

Weekends and bank holidays 10.00am to 6.00pm

To meet the needs of all the families a period of 45 minutes is provided for each arrangement. Should an extended viewing period be requested this can be discussed at the time of making the initial appointment.

Viewing of hospital deceased should be arranged with the bereavement care department in the first instance.
Tel. 023 81 20 4587 (Monday to Friday 9.00am to 4.30pm)

Alternatively or for any other reason contact with the mortuary department can be undertaken during working hours.

An out of hours viewing facility is available only where the needs of the family make this unavoidable, arrangements for viewings should be discussed with the on call duty technician.

The hospital duty / site manager must be contacted initially to authorise use of out of hours service. The on-call duty technician will then be contacted via mobile phone. They will liase with the family to agree an appropriate viewing date / time
This number must never be given to the deceased's relatives.