Neuropathology Department - User Manual

SOP Number (Doc ID)	**NP/QM/POL/002**
Version	**19**
Review Due	**24 Sep 28**
Replaces	**Version 18**
Author	**E Miller**
Authorised by	**D Chandy**
Location of Copies	**Neuropathology Office**

Document History

Version no.	Date	Comment
17	EM	Changes to specimen reception information made throughout document. Information about code for Neuropathology POD added. Requirements for users to record number of pots being sent added. Requirement to notify Neuropath if sending specimens from external site added throughout document. Need to label fresh specimens such as CSFs as urgent clarified. Section 7 updated to clarify requesting muscle biopsies from Neuropathologists process. Specimen requirements updated throughout. Section 1.6 updated to clarify CJD process.
18	MB	Full review of all sections - made more concise with updates to the different specimen types for sending. Feedback from User survey 2025 was to try and make the user manual more user friendly. Updates to molecular samples to include guidance for WGS and specimen requirements to be in line with NHS England guidance. CR40545 added to section 6. CR40546 added to section 8.3. CR40957 added to section 8.7 and CR41514 removed from section 8.6.3
19	EM	Table on page 1 updated to give review due date rather than review period as per trust guidelines. Section 8 header updated to indicate it covers all specimen requirements. Section 9 added following NCOMP4 to add disclaimer on referred work.

Table of Contents

Document History 1
Table of Contents 2
1 Introduction 3
1.1 Contact Information 3
1.2 Hours of Business: 4
1.3 Out of Hours 4
2 Specimen Labelling and Request Forms 5
3 Rejection of Samples 6
4 Query Inoculation Risk 6
5 Safety Information 6
6 Issuing of Diagnostic Reports 7
7 Referral of Cases to Another Department 7
8 Packaging and Transport of Specimens 8
8.1 Urgent Intra-Operative Specimens 9
8.2 Neurosurgical Biopsies for Histology 10
8.3 Samples for Potential Molecular Genetics and WGS 11
8.4 Biopsies for Electron Microscopy 12
8.5 Cerebrospinal Fluid (CSF) for Cytological Examination. 13
8.6 Muscle and Nerve Biopsies 14
8.7 Autopsy Specimens 17
9 Complaints Procedure 18
10 Data Protection 18

1 Introduction

The Neuropathology Department at North Bristol NHS Trust is managed through the Trust's Core Clinical Services Division (CCS), and provides a diagnostic pathology service offering the following range of investigations:

- a neurosurgical biopsy service, to include urgent intra-operative reporting
- cytological examination of cerebrospinal fluid specimens
- a muscle and peripheral nerve biopsy service
- macroscopic and microscopic examination of fixed brains, spinal columns and spinal cords, as well as a general autopsy histology service for cases both undergoing post-mortem examination within North Bristol NHS Trust, and for specimens referred to us from other Trusts.

All requests accepted by the laboratory will be considered an agreement to undertake testing as requested.

1.1 Contact Information

Address:

Department of Neuropathology
Pathology Sciences Building (Phase 2, Level 1)
Southmead Hospital
North Bristol NHS Trust
Bristol
BS10 5NB

Telephone:

Extensions for internal use are in bold.

Professor K Kurian (Consultant Neuropathologist/Laboratory Director)	0117 41**42405**
Dr K Urankar (Consultant Neuropathologist)	0117 41**42406**
Dr J Davis (Consultant Neuropathologist)	0117 41**42407**
Specialist Registrar	0117 41**42404**
Laboratory Manager/ Quality Manager	0117 41**42401**
Main Laboratory	0117 41**42400**
Secretarial Staff	0117 41**42402** & 0117 41**42403**

To ensure the department deals with your request efficiently, please direct all Neuropathology requests to **NeuropathologySecretaries@nbt.nhs.uk**

1.2 Hours of Business

The department is staffed between:

8:00 am and 5:15 pm - **Monday to Friday**

(Excluding bank holidays)

1.3 Out of Hours

We ***do not*** offer an on-call service. In case of emergency, users may contact a Consultant Neuropathologist in office hours, who may be able to arrange for out of hours cover. This must be done as far in advance as possible, cannot be guaranteed and will be dealt on case-by-case basis. In the unlikely event of sending a specimen out of hours, please send an email to **NeuropathologySecretaries@nbt.nhs.uk** **outlining:**

- Contact information including name and number
- Where you are from
- What the specimen request is
- If you would like us to call you back and leave details

Please note, fresh tissue is only accepted between 9am - 3pm if coming from an external site to allow for transport delays and 9am and 4pm if sent internally.

If taking a specimen out of hours, please adhere to the following guidelines to maintain specimen integrity:

Specimen Type	Storage
CSF	Store in refrigerator and notify the lab as above. Send as soon as possible once lab opens to prevent cells degenerating (within 48hrs). **Storage in a fridge for longer than 72 hours or at room temperature for more than a few hours will render the specimen diagnostically useless.**
Muscle/Nerve biopsy	**Do not take**. Muscles and nerves must be received fresh by the lab and need prior notification.
Peri-mortem muscle biopsy	These must be snap frozen as soon as possible – adhere to local guidelines on use of liquid nitrogen.
Intraoperative frozen section	**Do not take**. These can only be processed during lab hours with prior notice.
Fresh tissue (HBCs/cryovials/coakham pots)	Can be kept refrigerated at 4°C for up to 72 hours. (Frozen at -20˚C is best for integrity) and sent as soon as lab opens. To prevent drying out the biopsy should be kept in a sealed cryovial. No additives should be added. If kept at room temperature, the sample must be transported to the lab within 2 hours.
Autopsy Specimens	**Do not send** out of hours, receipt only available during working hours.

2 Specimen Labelling and Request Forms

The information provided below conforms to North Bristol NHS Trust's *Request Form and Specimen Labelling Policy* (Ref CG-163). This is posted on the Trust's Intranet resource.

Please label all **surgical specimen containers** with the following information:

- NHS number or MRN/hospital number
- The patient's surname & forename in full (please do not abbreviate).
- The patient's date of birth.
- The date of specimen collection
- And when appropriate, if the specimen is a potential inoculation risk (refer to section 1.6)
- Number of pots i.e. 1 of 2, 2 of 2.

All surgical specimens must be accompanied by a Neuropathology request form.

Request Forms:

Contact the laboratory to request forms to be sent via the pneumatic tube system. External sites can access the form by contacting the Neuropathology secretaries on **NeuropathologySecretaries@nbt.nhs.uk** or by downloading it from our website (Neuropathology Laboratory Services | North Bristol NHS Trust (nbt.nhs.uk).

This **request form** must record the information required for the specimen container and must be completed in full.

If a specimen is sent with a different request form, there is a risk it will be delivered to the wrong department, which may delay processing or even result in the specimen being processed by the wrong department.

ICE requests are acceptable for CSF samples. The CSF container must be clearly labelled for Neuropathology. ICE requests are not acceptable for any other specimen types.

Autopsy specimens:

Must be clearly labelled with the name of the deceased and accompanied by a copy of the autopsy report.

Written evidence from the next-of-kin must also be provided for:

- The consent of the autopsy examination
- The information concerning the fate of residual tissue, associated blocks and slides (also known as the HTA).
- Any constraints on sampling

Failure to supply this information may result in the specimen being returned unexamined. The collation of this information is performed by a department secretary, who will also coordinate requests for the urgent return of specimens.

3 Rejection of Samples

The samples received by the Neuropathology Department are regarded as non-repeatable samples so the department will always try it's best to provide a diagnosis. When the department receives incorrectly labelled samples, this will result in a delay to the specimen being processed. This has a greater impact on specimens that are sent to the department fresh where the integrity of the sample is time dependant. When an unlabelled sample is sent, the following steps will be followed:

1. For samples that are inadequately labelled the requester will be informed and advised that processing on hold until the sample is adequately labelled.
2. Transport of sample to external sites will be responsibility of the requestor.
3. Incidents of non-conformity with the policy, will be documented using departmental systems and may be escalated on the North Bristol Trust RADAR system for incident reporting.

4 Query Inoculation Risk

Any patient **with or suspected** of having any of the following are an inoculation risk:

- HIV
- Hepatitis B
- Hepatitis C
- Creutzfeld Jakob Disease
- Tuberculosis

For the safety of staff, please ensure that these investigations are kept to a minimum and **send any unfixed/fresh samples with adequate labelling** - "**Biohazard Risk**" or "**Inoculation Risk**" even if the risk is only suspected

CJD Specimens are not processed.

Any specimens that require testing for CJD should be referred to the National CJD Diagnostic Advisory Service and NHS National Prion Clinic. Further information can be found here:

THE NATIONAL CJD RESEARCH & SURVEILLANCE UNIT (NCJDRSU) | National CJD Research & Surveillance Unit

5 Safety Information

Formalin fixative used for Neuropathology specimens is toxic by inhalation and ingestion and can cause severe dermatitis on skin contact. Please return to the lab for disposal.

Please wear nitrile gloves when handling containers of these fixatives and ensure there is adequate ventilation. Specimen container(s) should be sealed in a plastic bag as soon as the labelled specimen(s) have been placed in them. Store the request form separately to ensure that it does not become contaminated.

Hazard data sheets for these substances are available on request from the Neuropathology Department.

6 Issuing of Diagnostic Reports

Once the reports have been authorised, they are available on the ICE system (except for postmortem reports) and are also securely emailed to the requesting clinician.

Requests for reports should be directed through the departmental secretaries. Verbal reports, either in person or by telephone, should only be provided by a member of the Neuropathology Department's medical staff.

We aim to provide a histology report for at least 80% of cases within the target times indicated below for the various categories of specimens examined in this department.

Neurosurgical biopsies	8 days
Muscle & peripheral nerve biopsies	11 days
Autopsy histology	65 days
Cerebrospinal fluid analysis	7 days
Intraoperative analysis	15 minutes from receipt in lab

Note that if additional work is required on a case (e.g., further immunohistochemistry, electron microscopy or molecular genetic testing), a later supplementary report will be issued.

If clinical advice is required, the clinician should telephone the departmental secretaries in office hours who will direct them to the appropriate Neuropathologist.

7 Referral of Cases to Another Department

In circumstances where a further diagnostic opinion is required for a case, material will be referred to another pathologist who is considered to have a high degree of specialist knowledge in that particular field, either within North Bristol NHS Trust, or elsewhere. The following departments are frequently used as referral centres.

All referral centres are checked annually to ensure they are accredited with the appropriate accreditation body.

Department of Cellular Pathology Southmead Hospital Westbury-On-Trym Bristol, BS10 5NB	Bristol Genetics Laboratory Pathology Sciences Southmead Hospital Westbury-on-Trym Bristol, BS10 5NB	Institute of Neurology Muscle Pathology Laboratory, 1st Floor, Queen Square House, Queens Square, London, WC1N 3BG
Department of Neurology Mitochondrial Diagnostic Service, 4th Floor Cookson Building, The Medical School, Framlington Place, University of Newcastle-Upon-Tyne, NE2 4HH	Electron Microscopy Unit 1LB5-71, Cellular Pathology, Cardiff & Vale UHB, University Hospital of Wales Heath Park, Cardiff, CF14 4XW	Department of Histopathology, Great Ormond Street Hospital, Great Ormond Street, London, WC1N 3JH

8 Specimens Requirements

All specimens sent to the Neuropathology Department at Southmead Hospital must be packed and labelled in compliance with the current Health and Safety and Transport legislation such as UN3373 labelling.

Specimens taken in Theatres in the Brunel Building can be sent via the pneumatic tube system using code 5050, or with the porters. Specimens sent via the pneumatic tube system must **ONLY** be sent in the tubes labelled for Neuropathology as these are leak-proof.

We do not process CJD or ?CJD specimens. These specimens must NEVER be sent via the pneumatic tube system.

All Urgent specimens must be labelled as urgent to prevent delays in processing.

See 'Biological agents: Managing the risks in laboratories and healthcare premises (Appendix 1.2)' published by the Health and Safety Executive Advisory Committee on Dangerous Pathogens, and available in PDF format at www.hse.gov\publications, for detailed advice on transport of specimens.

8.1 Urgent Intra-Operative Specimens

Intra-operative specimens are examined through a smear and frozen section. Some intra-operative specimens, particularly those of a hard or rubbery consistency, will not smear. Should this be the case, the specimen may be examined by frozen section only.

Prior Notification	Send an email to NeuropathologySecretaries@nbt.nhs.uk The laboratory must be telephoned on 0117 414 2400 just before sending an intra-operative specimen. If possible, please also contact the laboratory at the beginning of the procedure if you plan to send an intraoperative specimen. This will reduce the possibility of a delay in the provision of the result by a consultant neuropathologist.
Timeframe for Receipt of Sample in Lab	ASAP after taking (ideally no later than 20 minutes) to prevent tissue deterioration and ensure a diagnosis can be made; Last receipt of specimens 4:30pm Monday to Friday.
Specimen Size and Requirements	Minimum of at least 3mm
Container	Fresh tissue should be sent in a universal container labelled with patient details. The specimen pots must be clearly labelled and placed in a seal-able specimen bag.
Additives	None
Accompanying Information	Completed Neuropathology request form, (as outlined in **section 2**.) **It should also be clearly labelled as an urgent fresh specimen to prevent delays if delivered to the wrong department.**
Point of Delivery	**Internal:** Contact lab on ext. 42400 at earliest opportunity. Use pneumatic tube system – use the pods labelled 'Neuropathology 5050' only or by porter – preferably directly to Neuropathology Main Laboratory. **Never leave the sample in a Specimen Reception without speaking to a member of the Neuropathology team.** **External:** Contact lab on 01174142400 at earliest opportunity. You must arrange for transport to deliver in working hours to: Department of Neuropathology Pathology Sciences Building (Phase 2) Southmead Hospital Bristol BS10 5NB

8.2 Neurosurgical Biopsies for Histology

Prior Notification	None if in formalin fixative and clearly labelled for Neuropathology.
Timeframe for Receipt of Sample in Lab	Routine specimens in formalin should arrive at the lab on the day they are taken or on the morning of the next working day.
Specimen Size and Requirements	No specific requirements.
Container	Specimen pot of appropriate size (at least three times the specimen volume) containing a formalin fixative. If a large container is required, this can be provided by the Neuropathology Department. The container(s) must be clearly labelled (section 2) and placed in a sealable specimen bag.
Additives	Formalin (10% Neutral Buffered)
Accompanying Information	Completed Neuropathology request form as outlined in section 2, separately to the sealed specimen bag. Ensure the request form is fully completed including, if applicable, indicating any additional samples such as fresh tissue or inoculation/biohazard risk (section 4).
Point of Delivery	**Internal:** Use pneumatic tube system – use the pods labelled 'Neuropathology 5050' only or by porter – preferably directly to Neuropathology Main Laboratory. **Never leave the sample in a Specimen Reception without speaking to a member of the Neuropathology team.** **External:** Contact lab on 01174142400. You must arrange for transport to deliver in working hours to: Department of Neuropathology Pathology Sciences Building (Phase 2) Southmead Hospital Bristol BS10 5NB

8.3 Samples for Potential Molecular Genetics and WGS

Samples for genetic testing, including potential WGS are sent to Neuropathology for assessment and storage until a WGS request has been discussed by our consultants. Fresh tissue is to be sent as per the following guidelines.

Prior Notification	For fresh tissue, contacting the Neuropathology lab on 0117 414 4200 (ext 42400 for internal) is required.
Timeframe for Receipt of Sample in Lab	Biopsy samples can be kept refrigerated at 4°C for up to 72 hours. Frozen is best for integrity (-20˚C) and sent as soon as lab opens. To prevent drying out the biopsy should be kept in a sealed cryovial. No additives should be added. If kept at room temperature, the sample must be transported to the lab within 2 hours.
Specimen Size and Requirements	Frozen tissue should be in addition to the main specimen for standard of care testing. Ideally, two cryovials of tissue each containing 5 x 5 x 5 mm of adequate tumour rich tissue, avoiding necrotic areas. If the fresh tissue is too small to split, send all in one cryovial.
Container	Screw-top plastic cryovials (also called coakham pot, HBC, NUNC tubes) The container(s) must be clearly labelled as outlined in section 2 and placed in a sealable specimen bag.
Additives	None
Accompanying Information	Completed Neuropathology request form as outlined in section 2, placed in the separate pocket of the sealable specimen bag. Ensure that the number of cryovials taken has been indicated on the request.
Point of Delivery	**Internal:** Use pneumatic tube system – use the pods labelled 'Neuropathology 5050' only or by porter – preferably directly to Neuropathology Main Laboratory. **Never leave the sample in a Specimen Reception without speaking to a member of the Neuropathology team.** **External:** Contact lab on 01174142400 at earliest opportunity. You must arrange for transport to deliver in working hours to: Department of Neuropathology Pathology Sciences Building (Phase 2) Southmead Hospital Bristol BS10 5NB

8.4 Biopsies for Electron Microscopy

We accept a range of tissue samples from both within North Bristol Trust and from other establishments for ultrastructural examination for a variety of neurological conditions, for example, skin biopsies for CADASIL and Batten's disease.

Specimens are not processed in house for electron microscopy – they will be sent on to our referral laboratory.

Prior Notification	Notification required if delivery from external site.
Specimen Size and Requirements	1-2mm and not exceed 5mm
Container	Universal The container should be clearly labelled with details of the patient, as outlined in section 2 and placed in a sealable specimen bag.
Additives	Formalin as soon as possible after resection
Accompanying Information	A Neuropathology request form), completed as outlined in section 2. The form should clearly state the specimen is for Electron Microscopy and should provide adequate clinical information including an indication of what pathological condition is suspected. The form should be stored in a separate pocket to the specimen to prevent contamination.
Point of Delivery	**Internal:** Use pneumatic tube system – use the pods labelled 'Neuropathology 5050' only or by porter – preferably directly to Neuropathology Main Laboratory. **Never leave the sample in a Specimen Reception without speaking to a member of the Neuropathology team.** **External:** Contact lab on 01174142400. You must arrange for transport to deliver in working hours to: Department of Neuropathology Pathology Sciences Building (Phase 2) Southmead Hospital Bristol BS10 5NB Specimens from other hospitals are accepted and will be sent on to the referral electron microscopy laboratory, however it may be more efficient to make arrangements directly with an electron microscopy laboratory. If sending the specimen to Neuropathology, notify the lab on 0117 414 2400 prior to sending. The specimen may be sent by post or courier provided they are appropriately and securely packed.

8.5 Cerebrospinal Fluid (CSF) for Cytological Examination.

Prior Notification	Notification required if delivery from external site or taken out of hours (by email to **NeuropathologySecretaries@nbt.nhs.uk**)
Timeframe for Receipt of Sample in Lab	Ideally the same day and before 3pm for external sites to account for any transport issues. Samples can be refrigerated for up to 72 hours to account for weekends and bank holidays. They must not be left at room temperature. Where CSF requires analysis in multiple departments, a separate sample must be sent for each department as analysis methods in other departments may damage the integrity of the sample.
Specimen Size and Requirements	Minimum of **1 mL**, ideally **2 mL**; No maximum.
Container	A universal plastic specimen pot, clearly labelled with the patient's details, as outlined in section 2. The pot must be placed in a sealable specimen bag.
Additives	None
Accompanying Information	Completed Neuropathology request form, placed in the separate pocket of a sealable specimen bag, or a request on ICE. ICE requests should be filled out, including clinical details and any potential infection risks.
Point of Delivery	**Internal:** Use pneumatic tube system – use the pods labelled 'Neuropathology 5050' only or by porter – preferably directly to Neuropathology Main Laboratory. **Never leave the sample in a Specimen Reception without speaking to a member of the Neuropathology team.** **External:** Contact lab on 01174142400 at earliest opportunity. You must arrange for transport to deliver in working hours to: Department of Neuropathology Pathology Sciences Building (Phase 2) Southmead Hospital Bristol BS10 5NB

8.6 Muscle and Nerve Biopsies

8.6.1 Arranging for a Muscle or Nerve Biopsy Procedure to be Performed by the Neuropathology Department

Please note that the following information applies to the booking of both muscle and nerve biopsy procedures.

Muscle biopsy specimens are accepted from other hospitals or patients can be referred directly for the biopsy procedure to be performed by one of our neuropathologists on the monthly muscle biopsy theatre list at Southmead Hospital. If an urgent biopsy is required, Dr Urankar (or her proxy) should be contacted, and a biopsy may be able to be arranged under the emergency neurosurgical list or via plastics/orthopaedics.

There is a theatre slot for up to three muscle (or, less commonly, nerve) biopsies to be performed at Southmead Hospital.

In order to request a muscle biopsy, complete a Muscle Biopsy Booking Form (**NP/MGT/FM/039**), available from the Neuropathology secretaries (neuropathologysecretaries@nbt.nhs.uk) and email the complete form back to them together with any relevant referral/clinic letters. As much information as possible should be supplied regarding the patient's clinical history and recent investigations.

The referral will then be reviewed by the consultant neuropathologist at which point the choice of biopsy site, and the size and orientation of specimen, can, if necessary, be discussed.

Once the referral has been approved, it will be triaged with the Neurology Waiting List Co-ordinator (obi.rose@nbt.nhs.uk, 0117 414 0441) and added to the next available theatre slot (which may well be several weeks from the original date of referral). The Waiting List Co-ordinator will write to the patient with the appointment date and include an information pack relating to the muscle biopsy procedure and will liaise with them if there are any issues over the suitability of the theatre slot.

The Neuropathology secretaries will be able to advise you on the progress of the referral.

8.6.2 General Guidelines for Sending a Muscle or Nerve Biopsy Specimen to the Neuropathology Department

Prior Notification	Minimum of 24 hours' notice and notification when sent the muscle is sent to allow the lab to prepare.
Timeframe for Receipt of Sample in Lab	Send directly to laboratory after taking. Transport time should ideally be less than 60 minutes. If >1hr distance, transport straight away and notify laboratory – indicate time taken on request. Schedule the procedure early enough in the day to ensure the specimen **arrives at the laboratory before 3pm**, allowing time for the specimen to be sampled and prepared immediately after its arrival.
Specimen Size and Requirements	Muscle and nerve biopsies may be performed under local or general anaesthesia. If the biopsy is taken under local anaesthesia, please avoid infiltration of the biopsy area itself by the anaesthetic, which will seriously affect its suitability for assessment of some conditions. It is also important that any muscle fascicles are removed without prior diathermy. **Muscle:** Ideally sufficient tissue measuring 30 x 30 x 10 mm dissected from the surface of the muscle should be taken. This should be in alignment with the natural direction of the muscle fibres. Needle biopsies are more prone to desiccation and therefore may limit the subsequent testing and are not advised. **Nerve:** Ideally 10 - 30 mm length nerve to be sent. Normally the sural nerve. The specimens should **not** be tethered or pinned in any way. The choice of biopsy site, and the size and orientation of specimen, may need prior discussion with a consultant neuropathologist. **NeuropathologySecretaries@nbt.nhs.uk** for advice.
Container	Gently wrap in cling film and place in a universal specimen container or other airtight container. **Ensure that the specimen is not crushed whilst being wrapped.** If cling film is not available, the specimen can be placed on a non-absorbent support (e.g., a small piece of dental wax or foil). Ensure container clearly labelled with the patient's details and biopsy site.
Additives	**None** – do not allow specimen to come into contact with any fluid and **do not** place on ice.
Accompanying Information	All referrals and requests should be accompanied by the Muscle Biopsy Booking Form (**NP/MGT/FM/039**), available from neuropathologysecretaries@nbt.nhs.uk, and as much

	information as possible regarding the patient's clinical history and recent investigations. Ideally this paperwork can be emailed in advance to the secretaries.
Point of Delivery	**Internal:** Use pneumatic tube system – use the pods labelled 'Neuropathology 5050' only or by porter – preferably directly to Neuropathology Main Laboratory. **Never leave the sample in a Specimen Reception without speaking to a member of the Neuropathology team.** **External:** Contact lab on 01174142400 at earliest opportunity. You must arrange for transport to deliver in working hours to: Department of Neuropathology Pathology Sciences Building (Phase 2) Southmead Hospital Bristol BS10 5NB

8.6.3 Peri-Mortem Muscle Biopsies

Peri-mortem muscle biopsy samples are taken by the University Hospital Bristol and Weston NHS Foundation Trust (UHBW). The clinical teams are not aware in advance of these cases as it is related to the clinical condition, usually there is an unexpected deterioration of the patient condition.

Peri-mortem muscle biopsies may need to be taken out of hours. If this is the case, they cannot be sent to the Department of Neuropathology as there will be no one available to receive them. The muscle biopsy must still be collected urgently. Arrangements for this should be made with the out of hours (OOH) biomedical scientist at UHBW, who can be contacted on bleep 2331. The muscle will be stored in their freezer and transported to Neuropathology on dry ice during working hours. More information can be found on the UHBW protocol 'SPECIMEN COLLECTION'.

It is helpful to inform the Neuropathology department that a peri-mortem muscle biopsy is planned/ has been taken out of hours. This can be done by emailing **NeuropathologySecretaries@nbt.nhs.uk**. Please include a contact number and name, where you are contacting us from and the patient's details.

If the peri-mortem muscle biopsy is taken during Neuropathology opening hours it may be sent in the same way as a routine muscle biopsy. Please notify the laboratory when the biopsy has been sent so the department is aware it is coming.

8.7 Autopsy Specimens

The Neuropathology Department provides an autopsy brain, spinal column and spinal cord examination service, not only for North Bristol NHS Trust, but also for other NHS Trusts, Coroners and Police.

Prior Notification	Inform the department when before sending or collecting specimens.
Specimen Requirements and fixatives	Whole brain specimens should be fixed by suspension from the basilar artery in a 20% formalin solution for three weeks ideally, but a minimum of 1 week, before being sent to us. If the fixation time is less than 3 weeks, this must be indicated so further fixation can be carried out before the specimen is dissected. Infant brains under 6 months ideally should be fixed in a 1:10 ratio of 10% glacial acetic acid. Spinal cords should be fixed by immersion in formalin. Other tissue samples sent for examination should be immersed in formalin in clearly labelled specimen pots.
Packaging	The fluids must be drained off prior to transport. Brains should be supported in cotton wool if fragile and sealed in polythene bag then placed in bucket for transport. The specimen(s) should then be placed in a plastic bucket. Anatomical specimens should be placed in separate containers e.g. brain and spinal cord. Plastic buckets can be packed together in an appropriately sized **UN3373** certified transport box together. Use absorbent packaging around the specimen containers to ensure they are held firmly in place within the outer container. The box should be securely fastened and clearly marked as **Pathological Specimens.**
Accompanying Information	Send the autopsy report, HTA consent form & a completed Neuropathology request form.
Point of Delivery	**Never leave the sample in a Specimen Reception without speaking to a member of the Neuropathology team.** You must arrange for transport to deliver in working hours to: Department of Neuropathology Pathology Sciences Building (Phase 2) Southmead Hospital Bristol BS10 5NB Contact lab on **01174142400**. On arrival to be guided to the correct department.

9 Referring work

The department accepts referred lab work and for second opinions.

Please note that interpretation of laboratory stains outside of validated use is at the discretion of the requesting clinician. Please refer to the Neuropathology Repertoire for further details.

10 Complaints Procedure

The department has a full complaints procedure, and complaints can be made either in person or via telephone, email or letter to the Laboratory Manager (or in his/her absence the most senior member of the team).

The timescales for dealing with complaints are as follows:

Response by the end of the next working day	This applies to verbal or written concerns that can be handled on the spot or require a minimum of fact finding for resolution.
Response within 5-10 working days	Verbal or written concerns that require input from other work areas, for example from other departments within the Trust.

Once a full root cause analysis has been done and corrective/preventative action taken then the complainant will be made aware of the actions taken.

11 Data Protection

All data and information in the Neuropathology Department is handled in accordance with the North Bristol Trusts' Data Protection Policy and the Data Protection Act 2018.