Microbiology Division

Microbiology Swansea

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Microbiology User Handbook
Swansea Bay University Health Board
SW Wales

Contents

1. Introduction

Public Health Wales provides diagnostic microbiology testing for South-West Wales, based within Singleton hospital Swansea laboratory. Public Health Wales also operate hot lab services at POW Hotlab Bridgend and Morriston Hotlab Swansea within this region.

Regional Laboratory Manager	Julian Roger	julian.rogers@wales.nhs.uk
Regional Clinical Lead	Dr Brendan Healy	Brendan.Healy@wales.nhs.uk

Public Health Wales Microbiology Swansea provides:

- Extensive clinical microbiology diagnostic service, including Bacteriology, Mycology, Virology, Serology/Molecular, and Parasitology to primary and secondary care across Swansea Bay and Cwm Taf Health boards.
- Clinical infection management service including antibiotic stewardship.
- Infection prevention/control services and advice to Swansea Bay and Cwm Taf Health boards.
- Welsh/UK reference services for Cryptosporidium and Toxoplasma: User information available via Public Health Wales website*: Reference Laboratories and Specialist Services - Public Health Wales (nhs.wales)
- Epidemiological data for the Communicable Disease Surveillance Centre (CDSC) and support to Consultants in Communicable Disease Control (CCDC) in the investigation of outbreaks of infectious disease.
- Environmental microbiology services (including food, milk and water) to local environmental health departments, private customers and Swansea Bay and Cwm Taf Health boards.
- Rapid access to all national reference laboratory facilities through Public Health England.

Public Health Wales clinical microbiology services are accredited to ISO 15189:2012 by the United Kingdom Accreditation Service (UKAS) reference number 9510. Food, Water and Environmental microbiology services are accredited to ISO 17025:2017 by UKAS.

The remainder of this document focusses on the clinical microbiology services. Please see PHW website for further details on our FWE services.

For repertoire of clinical testing services available including accreditation status, turnaround times, any special instructions such as patient preparation & guidance for patient-collected samples; rejection criteria, and limitations/factors affecting test performance, please refer to Scope of Tests spreadsheet. Scope of Tests spreadsheet is included as an attachment.

2. Location of Laboratories

PHW Swansea Bay microbiology services operate over multiple sites with routine services for bacteriology, virology, and mycology, urgent and emergency on-call work provided at Swansea laboratory Singleton Hospital. Cryptosporidium and Toxoplasma reference services available at Swansea laboratory. Rapid diagnostic services are available for specific patient cohorts in Morriston and POW hospitals.

Toxoplasma Reference Unit & Cryptosporidium Reference Unit.

Information for each laboratory can be found on the relevant Public Health Wales webpage here:
Reference Laboratories and Specialist Services - Public Health Wales (nhs.wales)

2.1 Public Health Wales Microbiology Swansea, Singleton Hospital, Sketty, Swansea SA2 8QA

Hays DX address details:
PHW Microbiology Swansea
DX 6070300 Swansea 90 SA
Tel: 01792 285053

Pathology block Singleton Hospital

2.2 Public Health Wales Microbiology Morriston Hot Lab, Heol Maes Eglwys, Swansea SA6 6NL

Tel: 01792 704163

Enter via the main Hospital building, walk along the main corridor until your reach the end, with an exit on the right-hand side. Use the exit, the Pathology Building is on the left, across the Hospital road. Enter two sets of double doors on the ground floor into the Pathology Building, Hot Lab is the first door on the right.

2.3 Public Health Wales Microbiology POW Hot Lab, Coity Rd, Bridgend, Mid Glamorgan CF31 1RQ

Tel: 01656 753682

Enter via the main hospital, coffee shop and shop will be on the left-hand side. Walk down the corridor to the "T" junction and turn left. After approximately 40 paces to Zone B the Pathology Block is on the right-hand side of the corridor. Pathology reception staff will inform the Microbiology Lab that a visitor has arrived.

For contact details of specific personnel, please refer to section 4.

3. Laboratory Operational Times

3.1 Routine Service

All laboratories provide a routine service between Monday and Friday 08:45 to 17:00, Virology 08:45 to 17:15 (excluding Bank Holidays). The full routine diagnostic testing repertoire is provided during this time.

Note: For urgent requests during normal laboratory hours, please telephone the laboratory to ensure priority processing.

3.2 Weekends and Bank Holidays

A limited service is available on Saturdays, Sundays and Bank Holidays as follows:

Swansea Bacteriology:

Saturday/Sunday and Bank Holidays:
Urgent work only between 08:00-16:00
On-call service only 16:00-08:30

Swansea Virology:

Saturday, Sunday and Bank holidays:
On-call service 24hrs (09:00hrs-09:00hrs)

Morriston Hot Lab:

Weekdays and Bank Holidays: 08:00-22:00

Saturday/Sunday: 09:00-21:00

POW Hot Lab:

Weekdays and Bank Holidays: 08:00-22:00

Saturday/Sunday: 08:00-22:00

3.3 Emergency on-call service

Microbiology services are provided via the emergency on-call system during the following hours:

Swansea Bacteriology:

Monday to Friday: 20:00-08:00

Saturdays: 16:00-08:00

Sunday and Bank Holidays: 16:00-08:00

Swansea Virology:

Monday to Friday: 17:15- 08:45

Saturdays, Sundays and Bank Holidays: 24hrs (09:00hrs-09:00hrs)

Note: During these times a reduced service protocol is available. Please refer to section 5 or contact the laboratory for more information.

Reference facilities do not offer an emergency on-call service.

4. Access to Clinical/Technical Advice

4.1 During normal working hours (Monday to Friday 08:30-17:00)

4.1.1 Clinical Advice

Clinical advice is available at all sites and consultation about the investigation and management of infection are welcomed. For advice on diagnosis and interpretation of microbiology results, antimicrobial use, infection control including the use of isolation facilities, contact the duty medics, via Consultant connect for SBUHB consultants and via the Hub for POW Hotlab.

4.1.2 Technical Enquiries (including urgent results)

Swansea

Bacteriology	01792 285053
Virology	01792 285059/5060
Cryptosporidium Reference Lab	01792 285341
Toxoplasma Reference Unit	01792 285058
Morriston Hot Lab	01792 704163
POW Hotlab	01656 753682

4.1.3 Contact details for key staff

Name	Role/Specialism	Telephone No.	Email Address
Dr Brendan Healy	Clinical Lead/Consultant Microbiologist/Infectious Diseases	Via consultant connect	Brendan.Healy@wales.nhs.uk
Dr Ian Blyth	Consultant Microbiologist/Infectious Diseases/Training lead	Via consultant connect	Ian.Blyth@wales.nhs.uk
Dr Thomas Morris	Consultant Microbiologist/Infectious Diseases	Via consultant connect	Thomas.Morris2@wales.nhs.uk
Dr Edward Bevan	Consultant Microbiologist	Via consultant connect	Edward.Bevan2@wales.nhs.uk
Dr Prenesh Naicker	Special grade Doctor in Microbiology	Via consultant connect	Prenesh.Naicker@wales.nhs.uk
Dr Louise Wooster	Consultant Microbiologist	Via consultant connect	Louise.Wooster2@wales.nhs.uk
Dr Bassam Ben-Ismaeil	Consultant Microbiologist/ Virology Lead	Via consultant connect	Bassam.Ben-Ismaeil@wales.nhs.uk
Dr Jo Hargraves	Consultant Microbiologist	Via consultant connect	Joanna.Hargreaves@wales.nhs.uk
Dr Angharad Davies	Hon. Consultant Microbiologist	Via consultant connect	Angharad.Davies12@wales.nhs.uk
Nicola Lewis Delyth Davies Joanne Walters	Infection Control		Nicola.Lewis22@wales.nhs.uk Delyth.Davies@wales.nhs.uk Joanne.Walters@wales.nhs.uk sbu.InfectionPreventionandControlTeam@wales.nhs.uk
Richard Hopkins	Head of Department Bacteriology		Richard.Hopkins2@nhs.wales.uk
Jenny Hudson	Head of Department Virology		Jenny.Hudson@wales.nhs.uk
Dr Rachel Chalmers	Cryptosporidium Reference unit: Head of Unit		Rachel.Chalmers@wales.nhs.uk
Dr Edward Guy	Toxoplasma Reference unit: Head of Unit		Edward.C.Guy@wales.nhs.uk
Alec Stewart & Ellen O'Brien	Microbiology Hot Lab Operational managers		Alec.Stewart@wales.nhs.uk Ellen.O'brien@walse.nhs.uk
Jodie Murphy	Regional H&S Lead		Jodie.Murphy2@wales.nhs.uk
Julie Skyrme	Regional Quality Lead		Julie.Skyrme@wales.nhs.uk
Sylvia Arrowsmith	Regional Training Lead		Sylvia.Arrowsmith@wales.nhs.uk

4.2 Outside of normal working hours

Contact 01792 205666 for:

- Clinical advice (SpR or Consultant)
- Infection control (SpR or Consultant)
- Biomedical Scientist staff for specimen processing

Please note medical and technical staff, are not generally on-site outside of normal working hours and only a limited range of analyses are available through the emergency service (see section 5) Technical staff are not authorised to provide an out-of-hours results enquiry service.

5. Emergency on-call service protocols

5.1 Emergency specimens – Bacteriology

- Bacteriology on-call Biomedical Scientist (BMS) must be contacted through the hospital switchboard to initiate the processing of any on-call specimen.
- Specimens will only be processed outside normal laboratory hours following contact with the laboratory staff and only if the request meets the agreed criteria for bacteriology as indicated below.
- Arrangements should be made for the emergency samples to be delivered to the Microbiology laboratory.
  Samples received from within the hospital will arrive either via pod or porter delivered on Microbiology on-call tray.
  Microbiology pneumatic tube (POD) system: POD No. 902(Virology Specimen Reception), POD No. 905(Bacteriology Urine Lab).
- The results of any emergency work will only be telephoned directly to the requesting clinician or a nominated location. A provisional electronic report will be issued.

The on-call service should only be used for the processing of emergency work and cannot be used to obtain results from samples sent previously.

Only the following samples will be processed on-call:

- Operative specimens such as biopsies or pus.
- Normally sterile tissues/body fluids e.g., CSF, joint fluids, heart valves.
- Urines under 3 years (2 or less) until midnight
- Bronchoalveolar lavage (BAL) specimens and non-directed bronchoalveolar lavage (NBAL) – up until 10pm Mon – Fri.
- Rapid COVID tests.

The following samples will only be processed after authorisation by Clinical Bacteriology medical staff:

- MSU specimens not included in above categories and only if they will alter clinical management.
- Bronchoalveolar lavage (BAL) specimens and non-directed bronchoalveolar lavage (NBAL) – between the hours of 10pm and 8am Mon – Fri and 5pm – 8am Saturday, Sunday and Bank Holidays.

5.2 Emergency specimens – Virology

- Requests for emergency virology work, initiated after 23.00, require contact with the Consultant Virologist on-call for advice in the first instance. Exceptions: Transplant Coordinators, or Medico-legal specimens with Chain of Evidence.
- Specimens will only be processed outside normal laboratory hours following contact with the laboratory staff and if the request meets the agreed criteria for virology.
- Arrangements should be made for the emergency samples to be delivered to the Microbiology laboratory.
  Samples received from within the hospital will arrive either via pod or porter delivered on Microbiology on-call tray.
  Microbiology pneumatic tube (POD) system: POD No.902(Virology Specimen Reception), POD No. 905(Bacteriology Urine Lab).
- The results of any emergency work will only be telephoned directly to the clinician who requested the work or a nominated clinical colleague.

Note: The on-call service should only be used for the processing of emergency work and cannot be used to obtain results from samples sent previously.

Only the following samples will be accepted for processing on-call:

- Blood for virology screening from organ donors.
- Medico-legal specimens with chain-of-evidence documentation.

For other investigations and for all calls after 23.00 the Consultant Virologist on-call must be contacted for advice in the first instance prior to any request.

Reference facilities do not offer an emergency on-call service.

6. Test Requesting/Sample Collection

6.1 General Guidelines

Requests submitted to and accepted by the laboratory are considered an agreement between the laboratory and the requestor. This includes samples referred from other laboratories.

Samples and accompanying requests (paper or electronic) must be sufficiently labelled to ensure unequivocal traceability of the patient to the request and the sample.

The request must include either direct request of a specific examination or sufficient clinical information to guide testing and subsequent interpretation as needed. Failure to provide the above information may result in the request being rejected and no examinations being performed.

The responsible clinician/clinical team or service and contact details should also be noted on the request in order to direct the results to the appropriate recipient. Failure to do so may lead to the request being rejected or the result being unavailable.

Specimens should be placed in the appropriate, labelled container which must be securely fastened. This primary container must be placed into a clear plastic bag, sealed, and attached to the request form.

Specimens should be collected as per local procedures and following order of draw for blood tubes where appropriate. This information should be available via the local Trust's resources. Please refer to the Scope of Tests spreadsheet for further collection and handling requirements where relevant, including preparation of patients, amount of sample required, timing of collection, and storage/ transport conditions.

Please alert the laboratory to any deviations from the usual pre-examination procedures, as this could affect the outcome of the test and potentially lead to patient harm.

Please dispose of collection equipment with care – sharps should be disposed of in appropriate containers as per the local sharps policy and infective material should be disposed of as per local waste disposal/infection control policy.

The following notes will help to ensure that the best quality sample is received for testing by the laboratory.

- Blood cultures need to be processed in the laboratory within 4 hours of being taken, so please do not delay in sending these once taken.
- Do not send specimens in non-sterile containers.

- Only use red-top primary urine tubes (test tube) for urine samples for M, C & S. Please do not use these containers for any other Microbiology specimen types. All other specimens should be sent using the appropriate container, as specified in the Scope of Tests spreadsheet.
- Whenever possible, specimens should be obtained before antimicrobial agents have been administered.
- Always send pus for culture rather than a swab of the pus.
- The specimen taken should be representative of the disease process. For example, material swabbed from the opening of a sinus tract is more likely to yield commensal micro-organisms on the skin than would material obtained by curettage or biopsy of the base of the tract.
- Care must be taken to avoid contamination of the specimen by micro-organisms normally found on the skin and mucus membranes. Sterile equipment and aseptic technique must be used for collecting specimens, particularly for those from normally sterile sites.
- Always send isolates on transport swabs or appropriate slopes.
- Material must be transported promptly to the laboratory. Fastidious organisms may not survive prolonged storage or may be overgrown by less fastidious organisms before culturing.
- Please ensure samples such as blood or urine are sent in containers with the appropriate additives for the tests required and that minimum/maximum fill lines are adhered to.
- A list of specimens with advice on appropriate collection procedures is given in the Scope of Tests spreadsheet.
- Please check expiry dates on all specimen containers before use.

Please contact the laboratory for advice if there is any doubt about the best specimen to take or concerning the availability of a test (see contact details in section 4).

6.2 Request forms

- Where available, electronic test requesting via Welsh Clinical Portal/GP portals is preferable over paper request forms. Please consult the online guidance document or contact the local ETR/GPTR implementation team or the laboratory for assistance.
- Current versions of paper laboratory request forms are available through the hospital supplies department. Old versions of the request forms will still be accepted, providing the information below is apparent.
- Reference laboratory request forms can be obtained from the PHW website.

A paper/electronic request must accompany all specimens sent to the laboratory and should state the following information:

- Sufficient information to allow the unequivocal identification of the patient. This should include a combination of the patient's full name, date of birth, hospital/unit number, NHS number or anonymised reference number (e.g., ISH clinic number/donor number etc).
- Requesting location (ward/clinic/GP) and clinician/clinical team.
- Contact number of the requester for urgent results or communication of delays/problems with testing/clarification of requests.
- Specimen type, including anatomical site of sampling where relevant.
- Date and time of sample collection. Please ensure patients provide this information on self-collected samples.
- Examination/investigations required.
- All relevant clinical details including any anti-microbial treatment (recent, current, and intended), foreign travel, food and occupational history if applicable.
- Date of onset and duration of illness (particularly for virology investigations).
- For antimicrobial assays, the name, date/time of last dose of antimicrobial and the current dosing regimen.

Note: Specimens may not be suitable for testing if they are inadequately labelled so that the patient's identification is in doubt, or if they have leaked or been contaminated. In these circumstances we aim to inform the requesting clinical team prior to disposal wherever possible. This may be in the form of an electronic report.

6.3 Limitations of Microbiological Investigations

It is important to understand the limitations of microbiological investigations & particularly the factors that can affect test results.

- **Appropriate and relevant clinical information**

Please included any relevant clinical information in order for us to best assess the range of microbial pathogens that need to be excluded. The site of infection ('wound swab' is not enough), the date of onset, the type of rash present, any antibiotics that have been prescribed in the last 48 hours, any antibiotic allergy, D&V, recent travel abroad (state country) may all influence the way in which we process specimens and interpret the significance of microorganisms detected. Please write legibly.

- **The most appropriate sample(s)**

If a wound is oozing pus, then a sample of the pus is far superior to a pus swab. On the other hand, we do not have facilities to handle several litres of fluid from a pleural effusion! Wound swabs and genital swabs should be of the appropriate type - charcoal containing transport medium for the suspected gonorrhoea; dedicated ROCHE collection containers for swabs or urine for investigation of Chlamydia and gonorrhoea by NAAT testing;

charcoal containing transport medium should be used for MRSA screening; dry, red-topped cotton/flocked swabs for PCR on nose/throat swabs. Patients on ITU/HDU with atypical pneumonia should have a urine sample sent for Legionella antigen. Patients with petechial rashes should have an EDTA sample sent for Meningococcal PCR. Swabs from chronic leg ulcers are of limited value unless there is cellulitis present.

- **Transport times**

Bacteria/Viruses are living organisms, some of which may multiply in certain specimens e.g. E. coli in urine samples, whereas other more fastidious organisms such as Neisseria gonorrhoeae will begin to die very quickly. As a general rule, all swabs should be processed on the day they are collected, and urine samples must be collected into red topped containers with boric acid preservative.

All specimens should reach the laboratory as soon as is possible. It may be detrimental to the specimen if it is stored overnight, it is for this reason routine samples should not be collected out-of-hours.

- **Serological/Molecular tests**

Wherever possible, commercial assays used are CE-marked and fully verified. In-house assays are validated locally. However, no test is 100% sensitive or 100% specific. To compensate for this, we may use confirmatory tests or reference laboratory tests to confirm our findings.

If the clinical presentation does not fit with our findings, please repeat the test and/or speak to one of our clinical team for further advice.

6.4 Rejection of samples

Common reasons for rejecting samples for testing have been included throughout this document. Specific limitations for certain tests, which may lead to rejection of samples have also been included in the Scope of Tests spreadsheet.

The potential risk and impact on the patient outcome of acceptance or rejection of any sample is assessed on a case-by-case basis. The decision to accept or reject "precious"/non-repeatable samples will be noted on the laboratory report that is issued to the requesting clinical team.

6.5 Requirement for patient consent

The laboratory considers patient consent is implicit when it receives a test request from an appropriate healthcare professional. It is the responsibility of the patient's clinical team to provide explanation of the sample collection procedure, including any associated risks, as well as offering any

appropriate counselling and advice to the patient and/or families in relation to the results and treatment options.

Under the Human Tissue Act patient consent is not required for storage of material for diagnostic purposes for the benefit of the person from whom the tissue was removed during life.

For further information see:

- The Retention and Storage of Pathological Records and Archives. The Royal College of Pathologists and the Institute of Biomedical Science. (5th edition April 2015)
- Human Tissue Act 2004

7. High risk specimens & safety

Where a patient is known or believed to be high risk there is a requirement on the sender to identify specimens as such according to Health and Safety and Trust policy for the labelling of specimens and the general protection of staff.

Specimens are regarded as HIGH RISK if taken from patients who are known or suspected to be infected with transmissible agents, in particular TB, Hepatitis B virus, Hepatitis C virus, HIV, viral haemorrhagic fever (VHF), MERS-CoV, Smallpox and Creutzfeldt-Jacob Disease (CJD) or from groups with a high prevalence of such infections.

PLEASE NOTE:

If there is clinical suspicion that a patient may have viral haemorrhagic fever (VHF), Creutzfeldt-Jacob Disease (CJD), or smallpox i.e. persons from areas of high rates of endemic infection e.g. West Africa for VHF, China for SARS/ Avian Flu, Middle East for MERS-CoV, the medical officer(s) MUST contact the Microbiology consultant direct, prior to the collection of samples, to ensure appropriate material is collected and the laboratory is forewarned and can give additional advice as necessary.

In addition to the normal labelling requirements these samples must be labelled as HIGH RISK using the appropriate yellow sticker "DANGER OF INFECTION" or "HIGH RISK" on the container and the request form. The specimen should be placed in a Biohazard bag.

Samples from these patients MUST be discussed before being taken to ensure that labelling and transport is appropriate.

8. Transport and Receipt of Samples

8.1 Specimen Transport

Generally, specimens will be transported around the hospital in a designated transport carrier designed specifically for the purpose. Specimens transported between sites and from other external sources must meet the health and safety regulations, minimum standards set for transport of pathological specimens.

8.1.1 Transport arrangements for specimens within Singleton Hospital

Samples received from within the hospital will arrive either via the pneumatic tube (POD) system:

Virology Specimen Reception POD Number 902
Bacteriology Urine Lab POD Number 905

Microbiology specimen reception or Virology specimen reception. Additionally outside of normal working hours only delivered on Microbiology on-call tray by porter.

8.1.2 Transport arrangements for specimens from outside Singleton Hospital

Specimens could arrive via several different routes, Taxi drivers /Couriers/ Regular scheduled transport runs from Laboratory Medicine to Swansea Microbiology. Specimens could be dropped off in various locations throughout the Hospital site. Microbiology specimen reception or Virology specimen reception. Microbiology On-call tray-outside of normal working hours only. Porters Lodge.

8.1.3 Transport arrangements for specimens within Morriston Hospital

All samples are delivered to Pathology Reception in Blood Sciences, first floor during normal working hours. Microbiology staff collect Microbiology samples from reception to be sorted in the Hot Lab. Any samples specifically for the Hot Lab will be processed on site. Other Microbiology samples will be sent to Singleton Microbiology via Hospital Transport. Urgent samples should be brought directly to the Hot Lab based in Pathology.

Out of hours, samples will be delivered to Pathology Reception in Blood Sciences. Transport will forward the samples to Singleton Microbiology.

8.1.4 Transport arrangements for specimens within POW Hospital

All samples are delivered to the Pathology Reception during normal working hours. Any samples specifically for the Hot Lab will be processed on site. All other samples are sent to the Regional Lab in Singleton Hospital.

Samples delivered out of hours should be left in the blue box opposite Pathology Reception

For further information or guidance related to specimen transport arrangements at particular sites, including POD systems, please contact the laboratory.

Specimens may also be received by post provided that the packaging meets the Post Office regulations for transport of pathological material.

8.2 Receipt of samples Swansea

8.2.1 Normal Working Hours

Samples received from within the hospital will arrive either via the pneumatic tube (POD) system:

Virology Specimen Reception POD Number 902
Bacteriology Urine Lab POD Number 905

or Microbiology specimen reception or Virology specimen reception.

8.2.2 Outside Normal Working Hours

Samples received from within the hospital will arrive either via the pneumatic tube (POD) system:

Virology Specimen Reception POD Number 902
Bacteriology Urine Lab POD Number 905

or delivered on Microbiology on-call tray by porter/scheduled transport runs.

Receipt of samples Morriston Hot Lab

8.2.3 Normal Working Hours

All samples are delivered to Pathology Reception in Blood Sciences, first floor during normal working hours. Microbiology staff collect Microbiology samples from reception to be sorted in the Hot Lab. Any samples specifically for the Hot Lab will be processed on site. Other Microbiology samples will

be sent to Singleton Microbiology via Hospital Transport. Urgent samples should be brought directly to the Hot Lab based in Pathology.

8.2.4 Outside Normal Working Hours

Out of hours, samples will be delivered to Pathology Reception in Blood Sciences. Transport will forward the samples to Singleton Microbiology

Receipt of samples POW Hot Lab

8.2.5 Normal Working Hours

All samples are delivered to the Pathology Reception during normal working hours. Any samples specifically for the Hot Lab will be processed on site. All other samples are sent to the Regional Lab in Singleton Hospital.

8.2.6 Outside Normal Working Hours

Samples delivered out of hours should be left in the blue box opposite Pathology Reception

8.3 Retention of Samples

Samples are retained for a limited period for further tests and retrospective checks. Please contact the laboratory for relevant specimen retention times if required.

COMPLIANCE WITH THE HUMAN TISSUE ACT - Submitting tissue samples from deceased patients:

PHW Microbiology is not licensed by the Human Tissue Authority (HTA) to store tissues from deceased patients. Post-mortem samples are submitted to the laboratory by coroners or pathologists for examination to help them determine the cause of death. Obtaining consent to remove, store and use human tissues for a scheduled purpose is one of the underlying principles of the Human Tissue Act.

Unless the laboratory is informed that consent has been obtained or the coroner has requested that samples are retained for further testing, any residual sample will be disposed of on completion of testing and after the final report has been issued. Please note blood samples are exempt from this and will be stored according to normal laboratory protocols.

9. Results & Reporting

For expected processing/turnaround times for routine work, please refer to the Scope of Tests spreadsheet.

- Reports on authorised, completed work are available electronically on the Welsh clinical portal or other Hospital system and via GP links
- Most bacteriology culture results are reported after 2-5 days, depending on the investigation.
- Serology/immunology and virology reporting depends on the frequency of testing and the urgency of the request.
- Mycology Results reports can take up to 21 days dependent on investigation.
- Results of urgent requests and results that may aid immediate patient management will be telephoned by the laboratory. This includes all positive blood cultures, cerebrospinal fluid and sterile site fluids.
- Results of a highly confidential nature such as HIV/Hepatitis B will not normally be issued over the telephone.
- Requests for urgent results should be made using the contact numbers identified in section 4.

Please note the microbiology department will not transmit reports by FAX due to the sensitive nature of the information and limitations of data protection regulations.

Notification of delayed results

If the issuing of results is delayed beyond the expected turnaround time, we will attempt to notify the relevant clinical teams where the delay is deemed to create a risk to adversely affect patient management.

10. Protection of Personal information

The laboratory acts in compliance with the Caldicott and Data Protection Act Principles in respect of personal identifiable information and the protection of other sensitive material where disclosure may be inappropriate. This requires all organisations handling personal information to comply with a number of important principles regarding privacy and disclosure.

The Data Protection Act states that anyone who processes personal information must comply with eight principles. These state that information must be:

- Fairly and lawfully processed.
- Processed for limited purposes.

- Adequate, relevant and not excessive.
- Accurate and up to date.
- Not kept for longer than is necessary.
- Processed in line with individuals' rights.
- Secure.
- Not transferred to other countries without adequate protection.

The Act also allows people to find out what personal information is held about them. This could be on computer or on paper records.

Confidentiality of information requires that all persons working within the NHS who record, handle, store or in any capacity deal with confidential or person-identifiable information have a duty to maintain that confidence. That duty of confidence continues even after the death of the patient or after an employee or contractor has left the Organisation.

All employees have a recognised confidentiality agreement as part of their working contract. It is the responsibility of all staff to adhere to this agreement when dealing with any confidential information, in any format.

All staff are required to undertake mandatory information governance training every two years and are bound by the NHS Wales Information Governance Policy and Public Health Wales policies and procedures that require that staff and contractors also adhere to the requirements of the Data Protection Act 1998 and to Caldicott principles

Patient information is only accessible to authorised staff and will only be shared outside of the organisation when strictly necessary for patient care and with trusted organisations, such as specialist and referral laboratories. See section [11] for further information about referral laboratories.

11. Referral tests

Whilst the majority of routine testing can be completed at one of our laboratories, some specimens may need referral for confirmatory or specialist tests outside of the PHW Microbiology network.

The suitability of referral laboratories used are reviewed on an annual basis, auditing performance indicators such as turnaround time compliance as well as accreditation status.

12. Feedback & Complaints

PHW Microbiology welcomes your feedback to ensure we are providing the most suitable service for our users and, as a result, the patients. Please let us know what we are doing well as well as where you feel we could make improvements by completing our Microbiology User Feedback survey.

If a particular member of staff or department deserve recognition, please leave them a compliment.

Please note: the Microbiology user feedback survey is designed to be completed by healthcare personnel and not patients or members of the public. Please do not share these links with members of the public.

Voicing a concern or complaint allows us to investigate and learn from your experiences and improve the services we offer here in Public Health Wales. If the laboratory team cannot help to resolve your concern, details of how to make a complaint can be found here: https://phw.nhs.wales/feedback-and-complaints/

Appendix 1 Guidance for patient-collected samples

Collection of MSU/Clean Catch urine

The procedure needs to be explained to the patient.

Ask the patient to wash their hands before commencing the procedure. Ideally the sample should be collected early in the morning (concentration effect) and when the patient has a full bladder.

Female patients need to first separate the labia (prewashing the area gently with soap and water ensuring the washing/drying is completed "front to back" also helps prevent contamination).

The patient then commences voiding and after the initial flow should stop voiding urine, place the sterile urine pot (red topped boric acid urine collection tube) into the position of the flow or pass urine into a suitable sterile receptacle and then fill the urine collection tube to the mark (patients may require assistance with this).

The patient can then complete voiding into the toilet. If the patient cannot control voiding in this way the urine pot or sterile receptacle should be plunged into the urine flow and filled to the mark (so called "clean catch" sample).

Any splashes on the outside of the urine pot should be dried and the patient details applied to the label.

For male patients the collection method is the same overall, but it is essential to retract the foreskin and preferably cleanse the glans penis before sample collection begins.

Please ensure an accurate date of sample collection is handwritten on the request form. Failure to do so may result in the sample being rejected if the age of the sample cannot be determined.

Samples should be delivered and transported to the laboratory as soon as possible.

Collecting a stool sample

The procedure needs to be explained to the patient

<u>To collect a stool sample:</u>

- label the provided CE marked leak proof container with your name, date of birth and the date of sample collection.
- place something in the toilet to catch the stool, such as a potty or an empty plastic food container, or spread clean newspaper or plastic wrap over the rim of the toilet
- make sure the sample doesn't touch the inside of the toilet
- use the spoon or spatula that comes with the container to place the sample in a clean screw-top container and screw the lid shut
- aim to fill the provided container to around a third full.
- put anything that you used to collect the sample, including newspaper or clingfilm) in a plastic bag, tie it up and put it the bin
- wash your hands thoroughly with soap and warm running water

<u>Storing a stool sample:</u>

Stool samples should be delivered as soon as possible if this is not possible it may be stored in a fridge, but for no longer than 24 hours. Place the container in a sealed plastic bag first.

Faecal specimens requiring parasite investigation require a fresh, unpreserved specimen which should be transported immediately.