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DEPARTMENT OF MICROBIOLOGY CONTACT DETAILS

Forth Valley Royal Hospital (Block N Floor 2)

If telephoning from outside the hospital use: 01324 5(relevant 5-digit extension number)

Consultant  Dr S Jamdar  ext. 66679
Mobile  07825 365412

Consultant  Dr B Cooke  ext. 66678
Mobile  07818 457657

Associate Specialist  Dr. I King  ext. 66680
Mobile  07713 654686

Senior Chief BMS  Mr. G Inglis  ext. 66677

Chief BMS’s  Mr. M Williamson  ext. 66686
Mr. D Robertson  ext. 66685

Office (reports)  ext. 66696/7/8
Medical Secretary  ext. 66683

LABORATORY HOURS

Weekdays  8.30 a.m. to 5 p.m.
Saturdays  9 a.m. to 12.30
Sundays  10 a.m. to 12.30 (urgent samples only)

Outwith these hours the on call BMS is available for scientific guidance. Any clinical advice e.g. antibiotic therapy, should be sought from the on call Medical Microbiologist via the hospital switchboard. If samples are being sent within 30 mins of the lab closing, please contact the lab to inform them that the sample is due.

ADVICE AND CONSULTATION

A senior member of staff will always be available to give advice on the use of the microbiology service e.g. type of sample, method of collection. The Microbiologists are willing to discuss any problem on the collection of specimens, interpretation of results, management and treatment.

REQUEST FORMS

3 types of form are available,

- Ante Natal Serology (Blue form)
- MRSA Screening (Blue A4 forms)
- Blue Microbiology Request form (use for all other tests)

Please ensure that specimens and request forms are both adequately labelled so that they can be matched up without error and the result sent to the appropriate destination. If printed labels are used please ensure that they are applied to ALL copies of the form.

The minimum data required for the form is:
1 – CHI number (except a few special circumstances e.g. Visitor to the area, GU medicine)
2 – Name
3 – Date of Birth
4 – Address
5 – Source of request (e.g. Ward A21 FVRH)

The minimum data required for the sample is:

1 – Name
2 – Date of Birth
3 – Source of request

If you do not use the CHI number it may not be possible to link to earlier results or to issue a result via SCI store, therefore you may not receive the result.

Relevant clinical details should be included, in particular any antibiotic therapy current and recent. The date and time of sampling is also important. Please indicate any recent foreign travel.

Please use 1 form per sample with the following exceptions

Right and Left samples e.g. Eyes
Cervical and Vaginal Swabs
MRSA screens only if using MRSA form (do not use these forms if routine culture is also required)

DELIVERY OF SPECIMENS

Any delay in the transport of samples to the laboratory increases the likelihood of misleading or negative results; it is therefore desirable to have samples sent by pod transport system as soon as possible.
If any delay is unavoidable urine samples should be held at 4°C, other samples should be held at room temperature.
For Blood cultures - see individual heading

ROUTINE SPECIMENS

Routine specimens should be sent by pod transport system.

EMERGENCY SPECIMENS

A 24 hour emergency service is provided.

During laboratory hours contact the laboratory.

Outwith laboratory hours contact hospital switchboard, in order that the duty BMS may be contacted to ensure processing of emergency samples.

General guidance

The on call BMS is available for scientific guidance. Any clinical advice e.g. antibiotic therapy, should be sought from the on call Medical Microbiologist via the hospital switchboard

It is most important that one-off specimens which cannot be repeated, e.g. CSF, aspirates, and samples taken during operative or invasive procedures, should be processed urgently, as these samples may contain delicate or fastidious organisms which may not survive prolonged periods of reduced temperature or lack of nutrients.
Guidance for specific sample types

**Gentamicin and Vancomycin levels are available on call until 10pm.** Antibiotic assays after this time must be approved by the on call Medical Microbiologist, who will contact the on call BMS. Please note that these samples will not deteriorate and if the next dose is not due until the following morning, they can be processed during the normal working day.

**Needlestick injuries** - If a member of staff receives a needlestick injury, and they are unsure of their Hepatitis B vaccination status this may be available on the lab computer system. This can be accessed via direct ward link or from the lab. If the status is not known or available, then Hepatitis B antibody titres can be done as an emergency.

The Policy for **The Management of exposure to Blood Borne Virus Infection** is held within the A/E and Occupational Health departments.

**TESTS OFFERED AS OF NOVEMBER 2012**

**Urinary microbiology**
- Enumeration of WBC, RBC, Casts and Squamous epithelial cells.
- Quantitative culture, identification and antibiotic testing of isolates

**Enteric microbiology**
- Culture for enteric pathogens.
- C. difficile Toxin A/B testing
- Rotavirus antigen detection
- Examination for Cryptosporidium oocysts
- Examination for parasites
- Helicobacter pylori antigen detection

**Respiratory microbiology**
- Microscopy, culture, identification, and antibiotic testing of significant isolates, including fungi.
- Microscopy and culture for Mycobacteria

**General microbiology**
- Microscopy, culture, identification and antibiotic testing of significant isolates, including fungi.

**Serology**
- ASO and Syphilis
- Rubella, Varicella and Measles immunity
- Hepatitis A, B, C and HIV serology

**Other investigations**
- Chlamydia trachomatis/Neisseria gonorrhoeae PCR
- Antibiotic assays
- RSV detection
- Legionella urinary antigen (only available in-house for ITU patients)

Other samples will be referred to other labs as required.
SAMPLES REQUIRED FOR SPECIFIC TESTS

N.B. Please clearly identify if the sample is regarded as high risk
e.g. Patient positive for Hepatitis, HIV, TB, E.coli O157 etc.

<table>
<thead>
<tr>
<th>Test</th>
<th>Sample</th>
<th>Container</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ante natal serology</td>
<td>V.B.</td>
<td>Yellow top vacutainer</td>
<td></td>
</tr>
<tr>
<td>Antibiotic assays</td>
<td>V.B.</td>
<td>Yellow top vacutainer or plain paediatric</td>
<td>Inform lab and give details of time and dose</td>
</tr>
<tr>
<td>Blood culture</td>
<td>V.B.</td>
<td>Aerobic and Anaerobic or Paediatric BacTalert bottles</td>
<td>Do not remove bar code from the bottle or stick addressograph label over the bar code.</td>
</tr>
<tr>
<td>Chlamydia/N.gonorrhoeae – Male</td>
<td>First void urine or urethral swab</td>
<td>Chlamydia collection kit</td>
<td></td>
</tr>
<tr>
<td>Chlamydia/N.gonorrhoeae – Female</td>
<td>Endocervical swab or First void urine</td>
<td>Chlamydia collection kit</td>
<td></td>
</tr>
<tr>
<td>Chlamydia – ophthalmic</td>
<td>Eye swab</td>
<td>Chlamydia collection kit</td>
<td></td>
</tr>
<tr>
<td>CSF</td>
<td>CSF</td>
<td>White top universal</td>
<td>250 ml containers available from theatre if required</td>
</tr>
<tr>
<td>Culture</td>
<td>Tissue / Pus / Aspirates</td>
<td>White top universal</td>
<td>Please request Rotavirus if required</td>
</tr>
<tr>
<td>Culture</td>
<td>Swabs</td>
<td>Black Transport swab</td>
<td>Routine culture will not be performed</td>
</tr>
<tr>
<td>Faeces Culture</td>
<td>Faeces</td>
<td>White top 60 ml pot</td>
<td>Delicate organisms, send to lab promptly</td>
</tr>
<tr>
<td>H.pylori antigen</td>
<td>Faeces</td>
<td>White top 60 ml pot</td>
<td></td>
</tr>
<tr>
<td>Gonococcal culture</td>
<td>Female – Cervical Male – Urethral</td>
<td>Black transport swab</td>
<td></td>
</tr>
<tr>
<td>Hepatitis / HIV</td>
<td>V.B.</td>
<td>Yellow top vacutainer</td>
<td>Hep C PCR and HIV viral load - see below</td>
</tr>
<tr>
<td>Hepatitis C PCR</td>
<td>V.B.</td>
<td>Yellow top vacutainer</td>
<td>Separate sample required</td>
</tr>
<tr>
<td>HIV Viral load</td>
<td>V.B.</td>
<td>Yellow top vacutainer</td>
<td>Inform lab</td>
</tr>
<tr>
<td>Legionella Urinary Antigen</td>
<td>Urine</td>
<td>White top universal</td>
<td>Available in-house for ITU patients only</td>
</tr>
<tr>
<td>MRSA Screens</td>
<td>Nose and Perineal swabs</td>
<td>Black transport swabs</td>
<td>Use MRSA screening form</td>
</tr>
<tr>
<td>Mycology</td>
<td>Skin scrapings, nails, hair, etc.</td>
<td>Mycotrans container</td>
<td></td>
</tr>
<tr>
<td>Pertussis</td>
<td>Pernasal swab</td>
<td>Blue top pernasal swab</td>
<td></td>
</tr>
<tr>
<td>Pneumocystis</td>
<td>Bronchial washings</td>
<td>White top 60 ml pot</td>
<td>Inform lab</td>
</tr>
<tr>
<td>Respiratory culture</td>
<td>Sputa</td>
<td>White top 60 ml pot</td>
<td></td>
</tr>
<tr>
<td>RSV</td>
<td>Nasopharyngeal aspirate or nasal wash</td>
<td>White top universal</td>
<td>Inform lab</td>
</tr>
<tr>
<td>TB Culture</td>
<td>Sputa/ Bronchial wash</td>
<td>White top 60 ml pot</td>
<td></td>
</tr>
<tr>
<td>Urine Culture</td>
<td>MSU, CSU, SPA</td>
<td>Red top Universal</td>
<td>Paediatric containers available for small samples</td>
</tr>
<tr>
<td>Viral detection, PCR</td>
<td>Various</td>
<td>Lysis buffer for non respiratory samples</td>
<td>For respiratory samples see guidance on page 15.</td>
</tr>
<tr>
<td>Viral serology</td>
<td>V.B.</td>
<td>Yellow top vacutainer</td>
<td></td>
</tr>
</tbody>
</table>
ANTIBIOTIC ASSAY

All patients on potentially toxic antibiotics e.g. Gentamicin, Tobramycin, Vancomycin must have serum levels monitored. Full information on dosing and monitoring of these antibiotics is available in the antibiotic formulary.

BLOOD CULTURES

The laboratory uses the BacTalert automated blood culture system, this requires 2 bottles to be taken, 1 for anaerobic culture and 1 for aerobic culture. For Paediatric samples use a single specialised bottle.

Procedure for Taking Blood Cultures

Contaminated blood cultures are time-wasting for the lab and potentially misleading for the clinician. The following recommended procedure for taking blood cultures is designed to minimise both the risks of contamination of cultures and risk of needlestick injury to the operator. Remove the seals from the bottles, disinfect the tops with an alcohol swab and allow to dry. Withdraw 10mls of blood /bottle.

Note that the use of a standard syringe and needle to inoculate blood culture bottles and Vacutainer tubes carries a high risk of needlestick injury, and this should not be done.

Equipment

- Blood culture bottles
- Luer Vacutainer adaptor
- Wide barrel holder
- Holder insert (only if further bloods required)
- Butterfly needle
- Skin Disinfection
- Cotton wool or swab
- Non sterile gloves
- Sharps box
- Tourniquet
- Micropore tape

Wide barrel holder

Holder insert (if further bloods required)
Procedure

- Collect equipment and take to bedside
- Wash and dry hands
- Apply tourniquet and choose site for Venepuncture
- Clean skin thoroughly with appropriate skin disinfection. Repeat if the skin is visibly dirty. Allow to dry naturally
- Remove the flip tops from the caps of both anaerobic (pink) and aerobic (blue) bottles
- Wipe the exposed rubber caps of the bottles with an alcohol swab (70% isopropyl alcohol)
- Open butterfly needle and attach Vacutainer luer adaptor, then screw on wide barrel holder
- Put on non sterile gloves
- Perform venepuncture
- Hold butterfly in place with a piece of tape, if required
- Press adapter down over blood culture bottle, keeping bottle upright. Once filled, repeat for second blood culture bottle
- If other bloods are required insert smaller adaptor and fill other blood bottles, ensuring correct order of draw
- Remove butterfly needle and discard the whole unit into the sharps bin
- Apply cotton wool ball or swab to the venepuncture site until bleeding stops
- Complete the details on the bottle labels and request form
- Send bloods to lab

NB: Sterile gloves may be worn. But if care is taken to avoid touching the venepuncture site after skin preparation, then non-sterile gloves are acceptable.

All blood cultures taken are treated as urgent samples

Specimens taken during and outwith laboratory hours should be sent to the laboratory as quickly as possible (It is not necessary to inform the duty BMS).

CHLAMYDIA / N.GONORRHOEAE

PCR (molecular amplification) is used for Chlamydia / N.gonorrhoeae detection and all samples (urines and swabs) should be submitted using the specialist Chlamydia collection kit.

Specimen collection is a critical step since Chlamydia adhere to specific groups of cells.

Female - Whilst urine sampling is accepted it is preferable to take a cervical swab if a pelvic examination is being done. For non-invasive testing first void urine sample is perfectly acceptable.

Male - First void urine sample or urethral swab.

Ocular samples - Conjunctival swab.

Urine samples should be the first void taken at least 1 hour post previous micturition

Cervical swabs should be taken as detailed below, from the endocervical canal, after it has been cleaned (this can be done with the swab for bacterial culture if one is being taken).

1. Insert swab into the endocervical canal until most of the tip is not visible.
2. Rotate swab for 5 - 10 seconds inside endocervical canal.
3. Withdraw swab without touching any vaginal surfaces.
Once taken the swab must be broken into the supplied collection container (there is a scored line on the swab to make this easier) and sent to the Lab.

**Ocular Samples** should be taken as detailed below (after cleaning the conjunctiva with either a swab for bacterial culture) and placed in the collection container as above.

1. Clean all pus away from the eye with a swab. (this swab may be used for bacterial culture, or be discarded)
2. Evert lower eyelid, swab conjunctiva very firmly to ensure cells are removed using swab from the collection kit.
3. Break swab into transport medium and send to lab.

**CEREBROSPINAL FLUID**

Place 2 to 3 mls of CSF in a sterile universal container.
The laboratory or the duty BMS should be notified prior to lumbar puncture so that the specimen can be dealt with promptly.
If T.B. is specifically suspected please send as much CSF as possible as the number of organisms present is likely to be low.
If very small samples are received, culture will always take priority over microscopy, unless otherwise indicated.

**FAECES**

An aliquot of faeces should be submitted, a rectal swab is inadequate.
The basic range of organisms examined for is: - Salmonella, Shigella, Campylobacter, E.coli O157 and Cryptosporidia, Rotavirus, Helicobacter antigen or parasitic investigation if required. If good clinical information is provided other organisms will be looked for as appropriate e.g. Cholera, Yersinia.
All diarrhoeal stools from patients over 15 years will be tested for C.difficile toxin.

*Formed stools will not be examined for C.difficile. Stools for H.pylori antigen testing will not be cultured.*

**GONORRHOEA**

Cervical or Urethral swabs should be sent. High vaginal swabs are not acceptable.

**MRSA SCREEN**

Please send Nose and Perineal swabs. If there is a problem obtaining a Perineal sample then a Groin sample may be accepted. Use 1 swab for both nostrils and 1 swab for perineum or groin and submit with an MRSA screening form. Samples must be submitted in a sealed plastic bag. Further details are on the form.

**MYCOLOGY**

If required from an abscess, wound or sputum please request fungal culture on the request form along with routine culture, a separate sample is not required.
If it is a dermatological sample please submit skin scrapings, nails, hair etc. Please send in a Mycotrans container.

**PERTUSSIS**

Please send blue top Pernasal swab (thin wire).
PLEURAL, ASCITIC, SEROUS FLUIDS, ASPIRATES

Send as much fluid as possible in a sterile universal container (white top).

PNEUMOCYSTIS

Send a bronchial washing in a sterile universal (white top).

PUERPERAL SWABS

Sample from cervix.

PUS

As much pus as possible should be sent in a sterile universal container (white top). Swabs should not be sent if pus is available.

RSV

Send a nasopharyngeal aspirate or a nasal wash in a sterile universal container (white top). Please inform the laboratory. RSV kits for use in Children's Ward are supplied by Microbiology.

SPUTUM

Saliva is unsuitable and will not be processed.
Send purulent sputum in a white topped 60 ml container.
Please indicate if TB examination is required.

SWABS

Nature of specimen and exact anatomical site from which it is taken must be indicated on the form. 'Pus swab' or 'Wound swab' are unacceptable terms.

TISSUE

Specimens should be sent in sterile containers. If the sample is too large for a universal or sputum pot, 250ml containers are available from Theatre. These samples must not be sent in containers, which have previously contained formalin, as these are not sterile and may contain traces of formalin, which can kill infecting organisms.

URINE

Specimens must be taken in Red top Boric acid containers and sent to the laboratory as soon as possible, or be refrigerated at 4°C. Paediatric containers are available for small samples. If culture for Mycobacterium tuberculosis is required send three early morning samples of urine each day for 3 days.

Normal levels - < 40 WBC and < 40 RBC
SEROLOGY / VIRAL SEROLOGY

All serological tests require 5 - 6 mls of clotted blood in Yellow topped container or plain paediatric tube, except HIV viral load testing (See specific advice below)

Tests available in house

<table>
<thead>
<tr>
<th>Test</th>
<th>Normal levels</th>
<th>Children</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASO</td>
<td></td>
<td>&lt; 200</td>
<td>&lt; 300</td>
</tr>
<tr>
<td>Syphilis serology</td>
<td></td>
<td>RPR, TPPA (confirmatory tests)</td>
<td></td>
</tr>
</tbody>
</table>

Enzyme immunoassays (EIA)

<table>
<thead>
<tr>
<th>Test</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HBs Ag</td>
<td>HBe Ab</td>
<td>Rubella IgG</td>
</tr>
<tr>
<td>HBs Ab</td>
<td>Hep A total Ab</td>
<td>Syphilis IgG</td>
</tr>
<tr>
<td>HBC IgM</td>
<td>Hep A IgM</td>
<td>Varicella IgG</td>
</tr>
<tr>
<td>HBC total Ab</td>
<td>Hep C Ab</td>
<td>Measles IgG</td>
</tr>
<tr>
<td>HBe Ag</td>
<td>HIV 1 &amp; 2</td>
<td></td>
</tr>
</tbody>
</table>

Stat processing is available for urgent samples on request.

ANTE NATAL SCREENING

Send 5 -6 mls of clotted blood - This will be examined for Syphilis, Rubella G, Hepatitis B surface antigen and HIV.

N.B. If Hepatitis BsAg or HIV examination is not wanted then this must be specifically identified on the form.

Give full details of any illness and contact with rubella or the sample will be considered to be an immunity screen.

ASO

Send 5 - 6ml clotted blood.

HEPATITIS

Give full clinical details when requesting hepatitis serology so the sample can be tested for appropriate markers of infection or immunity. e.g. Patient IV drug abuser.

Refer to instructions for high risk samples.

Urgent samples can be processed on a stat basis if justified. If urgent sampling is required please contact the laboratory as soon as possible.

HEPATITIS C PCR

Use yellow top vacutainer tube, send to the lab promptly.

**THIS SAMPLE MUST NOT BE SENT FOR ANY OTHER ANALYSIS.**

It is vital that the sample is dealt with promptly. The sample is first centrifuged by the lab then sent to Gartnavel hospital, it is therefore best to avoid such samples on Friday.
HIV

Refer to instructions for high risk samples. Any urgent requests MUST be arranged directly with the Medical Microbiologist.

HIV Viral load

Use yellow top vacutainer tube, send to the lab promptly and inform them that the sample is on route. It is vital that the sample is dealt with promptly. The sample is first centrifuged by the lab then sent to Gartnavel hospital, it is therefore best to avoid such samples on Friday.

RUBELLA

Give full details of any illness and contact with rubella or the sample will be considered to be an immunity screen.

VARICELLA

Give full details of any illness and contact with Varicella or the sample will be considered to be an immunity screen. If urgent sampling is required please contact the laboratory.

VIROLOGY - REFERRED

Some viral serology as indicated above is performed in-house, all other virology samples are sent to other labs, normally to The Regional Virus Laboratory at Gartnavel hospital Glasgow (0141 211 0080), who have issued the following Guidance notes: -

Congenital CMV infection

If congenital CMV infection is suspected a urine sample is required for virus isolation, serological tests are discouraged.

Coxsackie testing

As there is no useful serological test for enteroviruses, echoviruses and Coxsackie virus, please send a throat swab for PCR testing.

Fatigue or non specific illness

Investigation of patients with fatigue or non specific illness of more than 3 months duration is generally unhelpful and sera are no longer accepted for these conditions.

High risk samples

If a patient has returned from abroad particularly South America, Asia and Africa there may be a risk potential which dictates the tests performed and the containment facilities required. In order to assess such samples please provide the following information.
1 - Country Visited
2 - How long Abroad
3 - Date of return
4 - Symptoms
5 - Date of onset of symptoms
# RESPIRATORY ILLNESS

<table>
<thead>
<tr>
<th>Possible Diagnoses</th>
<th>Organism</th>
<th>Test</th>
<th>Specimen in order of preference</th>
<th>Testing Laboratory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumonia</td>
<td>Influenza A B C RSV</td>
<td>PCR to detect virus (test run daily)</td>
<td>Gargle Nasopharyngeal Aspirate/Washings Bronchoalveolar Lavage Tracheal Aspirate Sputum Nasal and Throat Swab in Viral PCR Sample Solution (VPSS) or in normal saline</td>
<td>Regional Virus Lab Gartnavel Hospital Glasgow</td>
</tr>
<tr>
<td>Laryngotracheobronchitis (croup)</td>
<td>Parainfluenza virus 1-4 Human metapneumovirus Coronavirus Rhinovirus Adenovirus Mycoplasma</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bronchiolitis (infants)</td>
<td>Pneumocystis jiroveci (in immunocompromised)</td>
<td>PCR</td>
<td>BAL (preferred) or Sputum</td>
<td></td>
</tr>
<tr>
<td>Coryza (common cold)</td>
<td>CMV (in immunocompromised)</td>
<td>PCR to detect DNA</td>
<td>Venous Blood</td>
<td></td>
</tr>
<tr>
<td>COPD/COAD and Asthma</td>
<td>Chlamydia**</td>
<td>Serology</td>
<td>Venous Blood (paired sera)</td>
<td>Legionella Ref Lab Stobhill Hospital Glasgow</td>
</tr>
<tr>
<td>Pharyngitis</td>
<td>Legionella</td>
<td>Serology</td>
<td>Venous Blood</td>
<td></td>
</tr>
</tbody>
</table>

** This test is only offered on paired sera because a serological rise is more useful than a single high titre.

Consider Q-fever if the following have been present for at least 3 weeks:
- Culture negative endocarditis
- Atypical pneumonia
- Also consider in serious illness, outbreak situations or where there is animal contact.

N.B. Relevant clinical information must be provided in all cases for respiratory screening. If atypical pneumonia is requested as a test on a venous blood specimen then, in the absence of clinical information, only Legionella serology will be performed.

## VIRAL PCR DETECTION FOR NON RESPIRATORY SAMPLES

Please use Lysis Buffer for PCR detection. Please ensure that the top is on tightly as the sponge at the base of the swab can push the swab upwards and cause leakage.

## OTHER SERVICES

Pink top viral swabs can be used for culture. Other investigations may be available on request, or may be referred to another laboratory.
TIME LIMITS FOR REQUESTING ADDITIONAL WORK

Serology

If there is sufficient serum a small amount is retained for 2 years as an archive. Additional tests can be carried out using this archived sample within this time period. Please contact the Microbiology lab if any additional tests are required. These will be assessed on an individual clinical basis.

All Other Samples

For all urinary microbiology, enteric microbiology, respiratory microbiology, general microbiology and any other miscellaneous microbiology samples please contact the Microbiology lab as soon as possible if further tests are required.
Additional testing may be possible and these will be assessed on an individual clinical basis.

PROBLEMS OR COMPLAINTS

A senior member of staff is always available to discuss any problem or complaint. Please do not hesitate to bring any cause for complaint or suggestion to our attention in order that we may effect a speedy resolution.
**SCHEDULE OF REPORTING TIMES AND RESULTS**

**TURNAROUND TIMES**

Most turnaround times are dictated by the incubation times required for bacterial growth, and by the complexity of the sample. That is, a negative or simple positive sample will have a shorter turnaround time than a complex positive. Due to available staffing and technology many serological tests are done in batches.

Typical average turnaround times are:

<table>
<thead>
<tr>
<th>Test</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urines</td>
<td>12 - 72 hours</td>
</tr>
<tr>
<td>Enterics</td>
<td>48 - 72 hours</td>
</tr>
<tr>
<td>Blood culture</td>
<td>Initial report 48 hours. No further report unless positive. All positives issued orally as detected.</td>
</tr>
<tr>
<td>CSF</td>
<td>Initial report 1 hour. Final report 72 hours. All positives issued orally as detected.</td>
</tr>
<tr>
<td>T.B.</td>
<td>Initial microscopy 24 hours. Final report 12 weeks. All positives issued orally as detected.</td>
</tr>
<tr>
<td>Respiratory</td>
<td>24 - 48 hours (samples from cystic fibrosis patients 5 - 7 days)</td>
</tr>
<tr>
<td>General Micro</td>
<td>48 - 72 hours</td>
</tr>
<tr>
<td>Chlam. / N.gon.</td>
<td>48 - 96 hours</td>
</tr>
<tr>
<td>H.I.V.</td>
<td>1 - 72 hours</td>
</tr>
<tr>
<td>Hepatitis Infection</td>
<td>1 - 72 hours</td>
</tr>
<tr>
<td>Hep Immunity</td>
<td>1 - 72 hours</td>
</tr>
<tr>
<td>C Diff.</td>
<td>Toxin detection within 1 day</td>
</tr>
<tr>
<td>ASO</td>
<td>24 - 48 hours</td>
</tr>
<tr>
<td>RSV</td>
<td>Stat</td>
</tr>
<tr>
<td>Antibiotic Assay</td>
<td>Stat (Tobramycin dependent on referral lab)</td>
</tr>
<tr>
<td>Rubella</td>
<td>24 - 72 hours</td>
</tr>
<tr>
<td>Varicella</td>
<td>24 - 72 hours</td>
</tr>
<tr>
<td>Measles</td>
<td>24 - 72 hours</td>
</tr>
<tr>
<td>Syphilis</td>
<td>24 - 72 hours</td>
</tr>
<tr>
<td>Ante Natal Serology</td>
<td>24 - 72 hours</td>
</tr>
</tbody>
</table>

All stat sampling less than 1 hour except for Tobramycin.

Turnaround times of samples referred to other labs are varied.
REFERENCE LABORATORY CONTACT DETAILS

Routinely used laboratories

Department of Clinical Mycology
South Laboratory Building
Yorkhill Hospital
Glasgow G3 8SJ
Tel: 0141 201 0715

Department of Immunology
1st Floor Laboratories Building
Gartnavel General Hospital
21 Shelley Road
Glasgow G12 0XL
Tel: 0141 301 7752

Regional Virus Laboratory
Gartnavel General Hospital
P.O. Box 16766
Glasgow G12 OZA
Tel: 0141 211 0080

Scottish Bacterial Sexually Transmitted Infections Ref. Lab
Microbiology Department
Edinburgh Royal Infirmary
51 Little France Crescent
Edinburgh EH16 4SA
Tel: 0131 242 6081

Scottish Haemophilus, Legionella, Meningococcus & Pneumococcus Ref. Laboratory
Department of Microbiology
House on the Hill
Stobhill Hospital
133 Balornock Road
Glasgow G21 3UW
Tel: 0141 201 3836

Scottish Parasite Diagnostic Laboratory
Stobhill Hospital
133 Balornock Road
Glasgow G21 3UW
Tel: 0141 201 3029

Scottish MRSA Reference Laboratory
Stobhill Hospital
Glasgow G21 3UW
Tel: 0141 201 3475

Scottish E.coli 0157/VTEC Ref. Lab
Department of Lab Medicine
Royal Infirmary of Edinburgh
51 Little France Crescent
Old Dalkeith Road
Edinburgh EH16 4SA
Occasionally used laboratories

Health Protection Agency
The National Centre of Reference
& Specialist Microbiology
Respiratory & Systemic Infection Lab
Specialist & Reference Microbiology Division
61 Colindale Avenue
London NW9 5HT

Regional Clinical Virology Lab.
Royal Infirmary of Edinburgh
51 Little France Crescent
Edinburgh EH16 4SA

Microbiology Department
West Glasgow Hospitals University NHS Trust
Western Infirmary
Glasgow

Laboratory of Enteric Pathogens
Central Health Public Laboratory
61 Colindale Avenue
London
NW9 5HT

Clinical Microbiology & HPA
Collaborating Laboratory
Brucella Reference Unit
University Hospital Aintree
Lower Lane
Liverpool L9 7AL
Appendix

Links

Please note: links are only correct at time of printing

Linked to Controlled Document

- Document: Microbiology 336: Microbiology Laboratory Handbook v1.0 (Superseded)

Document Revision History

Superseded on 12-Nov-2012 16:59 by William Ennis

Version 1.0 superseded by version 2.0

Authorised on 12-Nov-2012 16:59 by William Ennis

Authorised version 2.0 - Authorised. The following users will be notified when a review is due for this document: William Ennis, Derek Robertson, Michael Williamson

Draft Created on 12-Nov-2012 16:56 by William Ennis

Reason: Amendment to Tobramycin, removal of H.pylori ab and addition of H.pylori stool ag. Also addition of section on time limits for requesting additional work.

Authorised on 30-Dec-2011 14:21 by William Ennis

Authorised version 1.0 - Authorised. The following users will be notified when a review is due for this document: William Ennis, Graeme Inglis, Derek Robertson, Michael Williamson

Creation on 30-Dec-2011 14:20 by William Ennis

New Document created