

REPertoire OF TESTS (A-Z)

This section covers the tests that our laboratory offers according to the service repertoire agreed with our users.

Our laboratory offers a range of specialist tests which are undertaken at reference laboratories. The information where a specific specialist test is performed is indicated in the 'Additional Comments' section for each test.

Please contact the laboratory for any queries regarding the tests offered and information regarding any special sample requirements.

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16s PCP PCR/ 18s Pan-fungal PCR




Investigation	16s PCP PCR/18s Pan-fungal PCR
Tests	PCR
Sample type	Any (including fixed tissue). Preferably from normally sterile sites.
Collection Container	Universal (white top) 
Sample collection	Unless stated otherwise in the test table, please send at least 200µL of liquid sample for testing, preferably 500µL to facilitate additional extraction and testing. Low volume samples may be diluted and tested, but reports will bear a caveat regarding the potential effect on assay sensitivity. For tissue samples, please send a matchstick head sized piece of the appropriate tissue in a sterile container.
Turnaround Time	10-14 days
Limitations	Sending sufficient sample is imperative when requesting multiple tests.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Micropathology University of Warwick Reference Laboratory.


Acanthamoeba Detection

Investigation	Acanthamoeba detection
Tests	Culture and PCR
Sample type	<ul style="list-style-type: none"> • Corneal scrape/biopsy, • Corneal swabs, • Corneal fluids, • Contact lenses (to be sent in the lens case).
Collection Container	<p>Sterile plastic bijoux container</p>  <p>Sterile universal container</p> 
Sample collection	<p>The material from a corneal scrape/biopsy should be collected with a needle or blade and rinsed into a small volume (1-2 mL) of sterile saline/distilled water in a small (<5mL) sterile vial/tube.</p> <p>Remove blades or needles as soon as possible after rinsing and before sending.</p> <p>For corneal swabs, do not send dry swabs, please add a small volume (1-2 mL) of sterile saline or sterile distilled water to the swab to prevent drying.</p>
Turnaround Time	10-14 days
Limitations	Reference laboratory can also perform culture from contact lenses or fluids; isolation from these specimens, whilst suggestive, does not necessarily implicate the amoeba as causing the patient's symptoms.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at HPA Malaria Reference Laboratory.


Adenovirus PCR

This test is used for the diagnosis of acute disease.

Investigation	Adenovirus PCR
Tests	PCR
Sample type	<p><u>DEPENDS ON ADENOVIRUS TARGET TYPE</u></p> <ul style="list-style-type: none"> • EDTA blood sample (quantitative, immunocompromised patients) • Respiratory secretions • Eye swabs • CSF (qualitative) • Faeces • Broncho-alveolar lavage
Collection Container	<p>Purple top blood tube</p>  <p>Viral swabs in viral transport medium</p>  


	<p>Sterile plastic bijoux container</p> 
Sample collection	<p>Send a viral (green top or red top) swab of vesicle fluid or affected mucous membranes. Faeces specimen may be passed into a clean, dry, disposable bedpan or similar container and transferred to an appropriate collection container.</p> <p>Specimens should be sent to the laboratory without delay during normal working hours.</p> <p>Outside of normal working hours samples should be refrigerated.</p>
Turnaround Time	10-14 days
Limitations	<p>False negatives may occur for a variety of reasons, for example inappropriate timing of sample collection, inappropriate sample, presence of organism below the detectable limit of the assay. Towards the limit of detection of an assay sampling variation will result in lower reproducibility. New and emerging variants may also occur which may not be detected by this assay.</p>
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.

Antenatal (booking blood) Serology

Investigation	<p>Hepatitis B surface antigen (qualitative)</p> <p>HIV-1 and 2 antibodies and HIV p24 antigen (qualitative)</p> <p>Treponema pallidum antibody (qualitative)</p>
Tests	Antibody/ Antigen detection
Sample type	Clotted blood
Collection Container	<p>Yellow top (minimum volume 3.5 ml)</p> 
Sample collection	<p>No special requirements.</p> <p>Specimens should be sent to the laboratory without delay during normal working hours.</p> <p>Outside of normal working hours samples should be refrigerated.</p>
Turnaround Time	5 days
Limitations	<p>Please clearly indicate ALL tests required.</p> <p>Please indicate clearly in the clinical details that sample is antenatal screening or booking blood.</p> <p>Please indicate if patient is a 'late booker'.</p> <p>Haemolysis may affect the result.</p>
Out-of-Hours-Testing	No
Additional Comments	



Anti-streptolysin titre (ASO Titre)

This test is used to determine past or current infection.

Investigation	Anti-streptolysin titre (ASO Titre)
Tests	Toxin Antibody detection
Sample type	Clotted blood
Collection Container	<p>Yellow top (minimum volume 3.5 ml)</p> 


Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	7 days
Limitations	Clinical details are essential for processing. Haemolysis can significantly affect the result.
Out-of-Hours-Testing	No
Additional Comments	

Ascitic Fluid Culture

Investigation	Ascitic Fluid Culture
Tests	Gram stain and culture
Sample type	Ascitic fluid
Collection Container	Universal (white top) (For direct culture and microscopy)  Blood culture bottles (For enrichment culture only) 
Sample collection	Optimally collected before antimicrobial therapy started. Samples should be taken using strict aseptic technique by trained medical staff in line with Trust procedure. Ideally a minimum volume of 1ml should be collected. Where adequate sample, also inoculate into blood culture bottle set. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	4 days, 5 days if sent in Blood Culture bottles
Limitations	Ideally samples should be collected before antibiotic treatment. Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	No
Additional Comments	

Avian Precipitins


This test is used to determine past or current infection.

Investigation	Avian antibodies (precipitins)
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours.

	Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Haemolysis may affect the result.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Immunology Department, Sandwell and West-Birmingham Reference Laboratory.


Beta-glucan

This test is used for the diagnosis of fungal infection and exclusion of fungal infection (if negative).

Investigation	Beta-glucan antigen detection
Tests	Determination of the presence of 1-3 Beta- D- glucan (fungal cell wall antigen) in serum
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Sample must be <48 hrs by the time it reaches the reference laboratory and must be a primary sample. Please note, a BAL sample is not suitable.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.

BK Quantitative PCR virus (Renal patients)


This test is used for the diagnosis of acute disease.

Investigation	BK quantitative PCR
Tests	PCR (quantitative)
Sample type	X 2 EDTA blood samples
Collection Container	Purple top (minimum volume 500µl) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours.
Turnaround Time	10-14 days
Limitations	Clinical details must state that it is a renal screening and sample should be sent to QA Hospital Portsmouth.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Queen Alexandra Hospital Portsmouth Reference Laboratory.

BK Quantitative PCR virus (Non-renal patients)

This test is used for the diagnosis of acute disease.


Investigation	BK quantitative PCR
Tests	PCR (quantitative)
Sample type	X 2 EDTA blood samples
Collection Container	Purple top (minimum volume 500µl)

	
Sample collection	No special requirements Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	For non-renal patients, or not specified to go to QA Hospital Portsmouth.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.

Blood culture

Blood cultures are used to detect the cause of an infection leading to bacteraemia or fungaemia. The results are important because they help guide appropriate treatment.


Results of all significant positive blood cultures will be telephoned to a clinician as soon as they become positive. As the isolation time depends upon the organism and the initial inoculum, this may vary from a few hours, up to five days after receipt.

Investigation	Blood Cultures
Tests	Gram stain, if positive & Culture
Sample type	Adult – 5-10 ml of blood per bottle. Paediatric – 3-4 ml of blood.
Collection Container	Adult blood culture set – Aerobic (blue) and Anaerobic (purple) bottles. Paediatric blood culture bottle – yellow top. 
Sample collection	A blood culture set is defined as one aerobic and one anaerobic bottle. For infants and neonates, a single aerobic bottle may be requested. Samples should be collected before antibiotic treatment. Samples should be taken as soon as possible after a spike of fever. N.B. To guarantee optimal result please ensure that the blood culture set is transported to the laboratory within 3 hours of the sample being collected.
Turnaround Time	1 – 6 days, but it might take longer if the sample is positive or requires extended culture.
Limitations	Blood cultures should only be taken when there is a reason to suspect infection. They should not be taken for routine assessment. Please collect the sample during or as soon as possible after a spike of temperature. Delays in transportation may affect the recovery of pathogens. Any recent antimicrobial therapy can have a significant effect on blood culture results by decreasing the sensitivity of the test. If patients have received previous antimicrobial treatment, bacteraemia should be considered even if blood culture results are negative. False negatives may occur if inadequate blood culture volumes are submitted. Do not remove or cover up barcode labels as these are required in the


	laboratory.
Out-of-Hours-Testing	Bottles should be left at room temperature in blood-issue room.
Additional Comments	

***Bordetella pertussis* Culture**

Whooping cough is a highly contagious disease that is caused by the fastidious Gram-negative coccobacillus *Bordetella pertussis*. In some cases, this syndrome may also be caused by *Mycoplasma pneumoniae*, and by viruses such as adenoviruses and enteroviruses.



Investigation	<i>Bordetella pertussis</i> culture
Tests	Isolation and characterisation of <i>Bordetella</i> species.
Sample type	Pernasal swab
Collection Container	Pernasal swab (blue top) 
Sample collection	A pernasal swab is inserted through a nostril and advanced along the floor of the nose until it reaches the nasopharynx. Optimally collected before antimicrobial therapy started. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated. Delays of over 48 hours are undesirable.
Turnaround Time	7 days
Limitations	Samples taken >2 weeks after onset of symptoms may not yield a positive result. It is advisable to take two pernasal swabs: one for the culture of <i>Bordetella</i> species and the other for viral culture; however nasal swabs for PCR are preferred. Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	No
Additional Comments	

***Bordetella pertussis* serology**



Investigation	<i>Bordetella pertussis</i> serology
Tests	Anti-PT IgG antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Samples should be taken 2 weeks after onset of paroxysmal coughing. Pernasal swabs are the most reliable way of making the diagnosis of whooping cough. Pertussis serology is usually more useful in adults presenting with a prolonged cough. Please state onset date. Vaccination history may help interpretation of results.

Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.

Bordetella pertussis PCR



Investigation	<i>Bordetella pertussis</i> PCR
Tests	PCR
Sample type	<ul style="list-style-type: none"> • Pernasal charcoal swab • Nasopharyngeal aspirate (NPA) • Throat swab in VTM
Collection Container	Pernasal swab for whooping cough  Viral swabs in viral transport medium 
Sample collection	No special requirement. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Please state vaccination history if known. If sample is urgent, check with a Consultant Microbiologist if Biofire PCR testing is required.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.

Broncho-alveolar lavage Culture

Investigation	Broncho-alveolar lavage Culture
Tests	Gram Stain & Culture
Sample type	Broncho-alveolar lavage
Collection Container	Universal (white top)  Sputum container 
Sample collection	Specimens should be fresh and optimally collected before antimicrobial therapy started. Minimum sample size is preferably 5mL. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	5 days
Limitations	Contact Consultant Microbiologist if <i>Pneumocystis jirovecii</i> testing is required. All samples are suitable for overnight refrigeration only, they must not be stored over a weekend.

	Delays in transportation may affect the recovery of pathogens. Any delay may allow overgrowth of Gram-negative bacilli, and <i>Haemophilus</i> species and <i>Streptococcus pneumoniae</i> may not get isolated.
Out-of-Hours-Testing	No
Additional Comments	

Brucella serology

Investigation	<i>Brucella</i> serology
Tests	Antibody detection
Sample type	<ul style="list-style-type: none"> • Clotted blood • CSF
Collection Container	Yellow top (minimum volume 3.5 ml)  Sterile plastic bijoux container 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10 - 14 days
Limitations	Please provide sufficient clinical details. Please state date of onset, risk factors (including occupation if appropriate), travel abroad over past six months.
Out-of-Hours-Testing	No
Additional Comments	This test is processed at Brucella Reference Laboratory in Liverpool.


Candida Antifungal Susceptibility testing

Investigation	Antifungal susceptibility testing for <i>Candida</i> species.
Tests	Antifungal susceptibility testing
Sample type	Pure culture
Collection Container	N/A
Sample collection	N/A
Turnaround Time	10-14 days
Limitations	Consultant Microbiologist will specify which drugs are to be tested.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Mycology Reference Laboratory.



Cerebro-spinal Fluid (CSF) Culture

Meningitis is defined as inflammation of the meninges. This process may be acute or chronic and infective or non-infective. Many infective agents have been shown to cause meningitis, including viruses, bacteria, fungi and parasites.

Investigation	Cerebro-spinal Fluid (CSF) Culture
Tests	Cell count, Gram stain and Culture
Sample type	1–2ml CSF.


Collection Container	Two sterile plastic bijoux containers. Please send 1st and 3rd samples. 
Sample collection	Optimally collected before antimicrobial therapy started. Do not delay antibiotic administration if clinically indicated. Dispense CSF (minimum 0.5ml in each bottle) into single use containers and label in order. Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception and the on-call Microbiology Biomedical Scientist contacted through switchboard.
Turnaround Time	2 hours for microscopy. 3 days for culture.
Limitations	State if TB culture or Cryptococcal culture/antigen testing is required. Cells disintegrate. A delay in transportation may produce a cell count that is not reflective of the clinical situation of the patient. Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	Yes, by arrangement, 24/7.
Additional Comments	

Chlamydia trachomatis Infection (Urine)


Investigation	Detection of <i>Chlamydia trachomatis</i> DNA in urine specimens
Tests	PCR
Sample type	Urine
Collection Container	Cobas PCR urine tube (Yellow Top)  Universal white top 
Sample collection	<u>Please do not use sample containers with boric acid.</u> Specimens should be collected and handled following the recommended guidelines on the collection kits. Illustrated collection procedure is provided on the back of the collection kits. Specimens should be sent to the laboratory without delay during normal working hours.
Turnaround Time	7 days
Limitations	Clinical details are essential for processing.
Out-of-Hours-Testing	No
Additional Comments	Please ensure that the lid of the Cobas PCR tube is securely tightened, to prevent sample from leaking. <u>Please note</u> urine testing for chlamydia in women has been known to produce false results. Please contact the Microbiology Laboratory to discuss before submitting urine samples from women. The laboratory now screens for <i>Neisseria gonorrhoeae</i> for both hospital and community patients. If you do NOT wish to have <i>N. gonorrhoeae</i> tested on individual patients, please make this clear on the request form

	(in the clinical details box).
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***Chlamydia trachomatis* Infection (genital swabs)**

Investigation	Detection of <i>Chlamydia trachomatis</i> DNA in genital swabs
Tests	PCR
Sample type	<ul style="list-style-type: none"> • Endo-cervical swab, • HVS, • Vulvo-vaginal swabs.
Collection Container	Cobas PCR female swab kit (Yellow Top) 
Sample collection	Specimens should be collected and handled following the recommended guidelines on the collection kits. Illustrated collection procedure is provided on the back of the collection kits. Specimens should be sent to the laboratory without delay during normal working hours.
Turnaround Time	7 days
Limitations	Clinical details are essential for processing.
Out-of-Hours-Testing	No
Additional Comments	<p>Chlamydia swabs have TWO separate expiry dates: one for the swab and one for the transport media contained in the pack. Note that the expiry date of the swab may differ by some months to that of the transport media. It is usually the media which has the shortest expiry date.</p> <p>On the Cobas PCR chlamydia swab, the expiry date can be found at the bottom of the blister pack, below the Lot number on the pack. The date is printed in the reverse order to that we normally use in the UK, i.e., YEAR/ MONTH, so March 2023 would appear as 2023/03. Please return any out-of-date swabs to the Microbiology Laboratory and request replacements as required.</p> <p>Please ensure that the lid of the Cobas PCR tube is securely tightened to prevent sample from leaking.</p> <p>The laboratory now screens for <i>Neisseria gonorrhoeae</i> for both hospital and community patients. IF you do NOT wish to have <i>N. gonorrhoeae</i> tested on individual patients, please make this clear on the request form (in the clinical details box).</p>


***Chlamydia trachomatis* infection (Non-genital sites: Eye, Throat, Rectum)**

Investigation	Detection of <i>Chlamydia trachomatis</i> DNA in non-genital swabs (Eye, Throat, Rectum, etc.)
Tests	PCR
Sample type	Swab from appropriate site
Collection Container	Cobas PCR female swab sample pack (Yellow Top) 
Sample collection	Specimens should be collected and handled following the recommended guidelines on the collection kits. Illustrated collection procedure is provided on the back of the collection kits. Specimens should be sent to the laboratory without delay during normal working hours.

Turnaround Time	7 days
Limitations	Clinical details are essential for processing. This assay is not validated for testing samples from non-genital sites.
Out-of-Hours-Testing	No
Additional Comments	<p>Chlamydia swabs have TWO separate expiry dates: one for the swab and one for the transport media contained in the pack. Note that the expiry date of the swab may differ by some months to that of the transport media. It is usually the media which has the shortest expiry date.</p> <p>On the Cobas PCR chlamydia swab, the expiry date can be found at the bottom of the blister pack, below the Lot number on the pack. The date is printed in the reverse order to that we normally use in the UK, i.e., YEAR/ MONTH, so March 2023 would appear as 2023/03. Please return any out-of-date swabs to the Microbiology Laboratory and request replacements as required.</p> <p>Please ensure that the lid of the Cobas PCR tube is securely tightened to prevent sample from leaking.</p> <p>The laboratory now screens for <i>Neisseria gonorrhoeae</i> for both hospital and community patients. IF you do NOT wish to have <i>N. gonorrhoeae</i> tested on individual patients, please make this clear on the request form (in the clinical details box).</p>

***Chlamydia trachomatis* (LGV)**


Lymphogranuloma venereum (LGV) is a sexually transmitted infection caused by a particular strain of *Chlamydia* bacteria.

Investigation	<i>Chlamydia trachomatis</i> (LGV)
Tests	PCR
Sample type	<ul style="list-style-type: none"> • Rectal swab, • Throat swab, • Vaginal swab, • Penile swab.
Collection Container	Cobas transport media 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Must be <i>Chlamydia trachomatis</i> positive and symptomatic.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Colindale Bacteriology Reference Laboratory.

***Clostridium difficile* Toxin detection**


C. difficile is a Gram positive, spore forming, strictly anaerobic rod, so named because of the difficulty in original culture and characterisation. Toxigenic strains produce large protein toxins A and B, both being major virulence factors. Most disease associated with *C. difficile* is intestinal, though *C. difficile* may be isolated from blood or tissues. Changes in the gut flora associated with broad spectrum antibiotics and chemotherapeutic agents can result in colonisation by *C. difficile*.

Investigation	<i>Clostridium difficile</i> Toxin
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Tests	Toxin Detection
Sample type	Faeces
Collection Container	Universal with spoon (blue top) 
Sample collection	Specimen may be passed into a clean, dry, disposable bedpan or similar container and transferred to an appropriate collection container. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated. Delays of over 48 hours are undesirable.
Turnaround Time	1 day
Limitations	Only performed on liquid / semi-formed stools (Bristol stool scale 5-7). <i>C. difficile</i> toxin test is performed on in-patient samples, patients over 65 years old or if history of antibiotic-associated diarrhoea (please state 3 months antibiotic history). Children less than 2 years old are unsuitable for investigation for <i>C. difficile</i> . Do not request if a positive result within previous 28 days.
Out-of-Hours-Testing	No
Additional Comments	


***Clostridium difficile* PCR ribotyping**

Ribotyping on *C. difficile* isolates from patients with *C. difficile* infection allows for the identification of certain strains such as 027 that can be difficult to control when causing outbreaks and/or may be associated with poor clinical outcome.

Investigation	<i>C. difficile</i> PCR ribotyping
Tests	PCR
Sample type	Faeces
Collection Container	Faeces container 
Sample collection	No special requirements
Turnaround Time	10-14 days
Limitations	Sample must be positive for <i>C. difficile</i> . Please discuss with Consultant Microbiologist.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Leeds Reference Laboratory.

CMV Avidity


This test is used to aid differentiation of primary and secondary reactivation of CMV.

Investigation	CMV Avidity
Tests	Enzyme-linked immunosorbent assay (ELISA)
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours.

	Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Must be CMV IgG positive.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.



CMV IgG and/or CMV IgM

These tests are used for the diagnosis of acute/recent or reactivated disease (IgM) or if evidence of past infection/exposure required (IgG).

Investigation	CMV IgG and/or CMV IgM
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	6 days
Limitations	Clinical details are essential for processing. Clearly state whether screen or suspected infection. Please provide sufficient clinical details.
Out-of-Hours-Testing	No
Additional Comments	


CMV PCR

This test is used for the diagnosis of acute disease. For diagnosis of congenital CMV send neonatal urine sample within first three weeks of life.


Investigation	CMV PCR
Tests	PCR
Sample type	<ul style="list-style-type: none"> • EDTA blood • Urine
Collection Container	Purple top (minimum volume 500µl)  Universal (white top) or yellow top (minimum volume 5ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Clinical details are essential for processing.
Out-of-Hours-Testing	No
Additional Comments	This test is processed at UKHSA Bristol Reference Laboratory.

Corneal Scrape Culture


Keratitis is infection of the cornea. This is a serious condition requiring prompt and meticulous investigation and may progress to perforation and blindness if treatment is unsuccessful. Initial infection with keratitis may progress to endophthalmitis if inappropriately treated. Predisposing factors include contact lens wear followed by pre-existing ocular disease including herpes simplex keratitis, ocular trauma, ocular surgery, laser refractive surgery and use of topical steroids. The condition may be caused by a wide range of bacteria, fungi and parasites.

Investigation	Corneal Scrape Culture
Tests	Gram stain & Culture
Sample type	Corneal scrape
Collection Container	Direct inoculation onto plates (CBA, CHOC, FAA & SAB), slide and into saline bottle (if Acanthamoeba investigation is required) 
Sample collection	Optimally collected before antimicrobial therapy started. Carefully smear material onto agar plates and onto glass slide (circle area with permanent marker). If insufficient specimen to make an impression smear and inoculate plates, please prioritise culture plates. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated. Delays of over 48 hours are undesirable.
Turnaround Time	2 hours for microscopy (During normal working hours) 2 – 5 days for culture.
Limitations	Requires good amount of cellular material. Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	No
Additional Comments	




COVID-19 PCR

Investigation	Covid-19 PCR
Tests	PCR
Sample type	<ul style="list-style-type: none"> • Nose swab • Throat swab • Nasopharyngeal swab
Collection Container	Viral swabs in viral transport medium 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours.
Turnaround Time	6 hours.
Limitations	
Out-of-Hours-Testing	Out of hours testing is performed by POCT team.


COVID-19 Genome Sequencing

Investigation	Covid-19 Genome Sequencing
Tests	Whole Genome Sequencing
Sample type	Covid-19 positive VTM sample
Collection Container	Viral swabs in viral transport medium 
Sample collection	No special requirements
Turnaround Time	10-14 days
Limitations	Sample must be positive for Covid-19. All samples with CT value less than 30 will be sent for sequencing.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Porton Down Reference Laboratory.

Cryptococcus Antigen


Investigation	<i>Cryptococcus</i> antigen detection
Tests	Antigen detection
Sample type	<ul style="list-style-type: none"> • Clotted blood, • CSF, • Biopsy.
Collection Container	Yellow top (minimum volume 3.5 ml)  Sterile plastic bijoux container  Sterile universal container 
Sample collection	Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Only tested on immunocompromised (including HIV positive) patients.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at the Mycology Reference Laboratory.

Cryptosporidium microscopy

Investigation	<i>Cryptosporidium</i> microscopy
Tests	ZN stain for the detection of <i>Cryptosporidium</i> sp.
Sample type	Faeces
Collection Container	Universal with spoon (blue top) 
Sample collection	No special requirements Specimens should be sent to the laboratory without delay during normal


	working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	2 days
Limitations	Only tested on BS5-BS7 type stool samples or if specifically indicated in clinical details.
Out-of-Hours-Testing	No
Additional Comments	

Detection of Viruses in Faeces samples (e.g., enterovirus, etc.)

Investigation	Detection of viruses in faeces samples
Tests	Viral PCR
Sample type	Faeces
Collection Container	Universal with spoon (blue top) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Send if suspected viral meningitis.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.


Detection of Viruses in CSF samples

(Standard: HSV, Varicella Zoster, Enterovirus. Children: Parechoviruses and HHV-6)


Investigation	Detection of viruses in CSF samples
Tests	Viral PCR
Sample type	CSF
Collection Container	2 sterile bijoux containers. Send 1st and 3rd samples, appropriately labelled. 
Sample collection	Dispense CSF (minimum 0.5ml in each bottle) into single use containers and label in order. Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception and the on-call Microbiology Biomedical Scientist contacted through switchboard.
Turnaround Time	10-14 days
Limitations	Send if suspected viral meningitis. Laboratory may send this sample to reference laboratory if CSF cell count and CSF biochemistry suggests likely viral meningitis.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.

Ear Swab Culture

Investigation	Ear Swab Culture
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Tests	Culture
Sample type	Ear swab
Collection Container	Transport swab (black top) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	4 days
Limitations	Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	No
Additional Comments	

EBV Serology

Investigation	EBV Serology
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	5 days
Limitations	Clinical details are essential for processing
Out-of-Hours-Testing	No
Additional Comments	






EBV PCR

This test is used for the diagnosis of acute disease.

Investigation	EBV PCR
Tests	PCR
Sample type	EDTA blood
Collection Container	Purple top (minimum volume 4 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Clinical details are essential for processing. False negatives may occur for a variety of reasons, for example inappropriate timing of sample collection, inappropriate sample, presence of organism below the detectable limit of the assay. Towards the limit of detection of an assay sampling variation will result in lower reproducibility. New and emerging variants may also occur which may not be detected by this assay.

Out-of-Hours-Testing	No
Additional Comments	This test is processed at UKHSA Bristol Reference Laboratory.


Enterovirus Qualitative PCR

Investigation	Enterovirus Qualitative PCR
Tests	PCR
Sample type	Depends on enterovirus target type: <ul style="list-style-type: none"> • CSF • EDTA blood sample • Faeces • Throat swab
Collection Container	<p>Sterile plastic bijoux container</p>  <p>Purple top (minimum volume 500µl)</p>  <p>Faeces container</p>  <p>Viral swabs in viral transport medium</p>  
Sample collection	<p>No special requirements.</p> <p>Specimens should be sent to the laboratory without delay during normal working hours.</p> <p>Outside of normal working hours samples should be refrigerated.</p>
Turnaround Time	10-14 days
Limitations	<p>Primary assay for viral CSF requests with VZV, HSV (and Parechovirus/HHV6 appropriate in children). Enterovirus PCR covers a range of non-polio enteroviruses, echoviruses, parechoviruses and Group A and B coxsackie viruses.</p> <p>Must be discussed with a Consultant Microbiologist prior to sending to the Reference Laboratory.</p>
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.


Eye Swab Culture

Infections of the eye can be caused by a variety of microorganisms. Swabs from eyes may be contaminated with skin flora, but any organism may be considered for further investigation if clinically indicated. Exogenous organisms may be introduced to the eye via hands, fomites (e.g., contact lenses), traumatic injury, or following surgery. Haematogenous spread from a focus elsewhere in the body can also occur.


Investigation	Eye Swab Culture
Tests	Culture
Sample type	Eye swab

Collection Container	Transport swab (black top) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	4 days
Limitations	Separate samples should be collected into appropriate transport media for detection of viruses, <i>N. gonorrhoeae</i> and/or <i>C. trachomatis</i> . Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	No
Additional Comments	

Faeces Culture


Investigation	Faeces Culture
Tests	Culture and sensitivities
Sample type	Faeces
Collection Container	Universal with spoon (blue top) 
Sample collection	Optimally collected before antimicrobial therapy started. Specimen may be passed into a clean, dry, disposable bedpan or similar container and transferred to an appropriate collection container. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	4 days
Limitations	Clinical details are essential for processing. Shigella culture may be less effective if sample arrives more than 4 hours after sample taken. Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	No
Additional Comments	

Faecal Gastroplex PCR



Investigation	Faecal Gastroplex PCR
Tests	PCR
Sample type	Faeces
Collection Container	Universal with spoon (blue top) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Immediate dispatch for testing is preferred.

Out-of-Hours-Testing	No
Additional Comments	This test is processed at UKHSA Bristol Reference Laboratory.

Fertility Screening


Investigation	Fertility screening
Tests	<ul style="list-style-type: none"> • HIV, • Hepatitis B core antibody, • Hepatitis B Surface antigen, • Hepatitis C antibody.
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	
Out-of-Hours-Testing	No
Additional Comments	This test is processed at UKHSA Bristol Reference Laboratory.

Full Respiratory Panel (PCR)



Investigation	Detection of respiratory viruses
Tests	PCR
Sample type	Viral swab
Collection Container	Green topped swab  Red topped swab 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	1-2 days
Limitations	Samples are firstly tested on the Cepheid Gene Xpert PCR platform to rule out SARS, RSV, Flu A and Flu B infections. If the sample is negative for these viruses, Consultant Microbiologist decides whether it needs testing for full respiratory panel on Biofire PCR platform.
Out-of-Hours-Testing	No
Additional Comments	Not tested routinely

Functional Antibodies (Pneumococcal IgG, Haemophilus IgG, Tetanus IgG)

Investigation	Functional Antibodies
Tests	<ul style="list-style-type: none"> • Pneumococcal IgG, • Haemophilus IgG, • Tetanus IgG.
Sample type	Clotted blood


Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	None
Out-of-Hours-Testing	No
Additional Comments	This test is performed at New Cross Reference Laboratory.

Fungal Culture


Investigation	Fungal Culture
Tests	Microscopy & Culture
Sample type	<ul style="list-style-type: none"> • Skin • Nails • Hair
Collection Container	Fungal culture kit  Universal white top 
Sample collection	<p>Skin Specimens: Skin lesions should be collected by scraping skin from the advancing edge of the lesion with a blunt scalpel blade or other sharp instrument. Place the scraping into a special Mycology transport pack. Please make sure you send enough material for both microscopy and culture. At least 5mm² of skin flakes are required.</p> <p>Nails: Clippings should include the full thickness of the nail and extend as far back from the edge as possible. Samples should be sent in a Mycology transport pack. Several small parings are preferred to one large sample to optimise culture results. Nail parings should be taken from the diseased area, the discoloured or brittle parts of the nail and cut back as far as possible from the free edge as some fungi are restricted to the lower parts. Scrapings can also be taken from under the nail to supplement the clipping. Nail clippings often fail to grow fungi even if present.</p> <p>Hair: Hair should be plucked from affected areas together with skin scrapings from associated scalp lesions. Broken lustreless hair should be selected from the margin of the scalp lesion. Hair should be removed with epilating forceps. The hair follicle and one inch of proximal hair should be sent to the laboratory. Receipt of cut distal ends will not be processed.</p>
Turnaround Time	7 – 10 days for microscopy 3 – 4 weeks for culture.

Limitations	Swabs are of little value for the investigation of dermatophyte infections. Delays in transportation may affect the recovery of pathogens. For further information and guidance on recommended treatment options please refer to PHE guide: Fungal skin and nail infections guidance.pdf (publishing.service.gov.uk)
Out-of-Hours-Testing	No
Additional Comments	

Fungal precipitins


Investigation	Fungal precipitins
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Clinical details are essential for processing.
Out-of-Hours-Testing	No
Additional Comments	This test is processed at UKHSA Bristol Reference Laboratory.

Gonococcal Culture (GUM clinic only)

Investigation	Culture for <i>Neisseria gonorrhoeae</i> (GUM clinic only)
Tests	Culture and sensitivities
Sample type	<ul style="list-style-type: none"> • Endo-cervical swab, • Urethral swab, • Throat swab, • Rectal swab.
Collection Container	Transport swab (black top) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Swabs for gonococcal investigation should not be refrigerated as this significantly reduces the recovery rate.
Turnaround Time	4 days
Limitations	Clinical details are essential for processing. Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	No
Additional Comments	


Gynaecological Culture

Investigation	Gynaecological Culture
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Tests	Microscopy (where applicable) & Culture
Sample type	<ul style="list-style-type: none"> • Vaginal swab, • Endocervical swab, • Urethral swab, • Penile swab.
Collection Container	Transport swab (black top) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated. Optimally collected before antimicrobial therapy started.
Turnaround Time	4 days
Limitations	Please refer to guidance on PHE website as to when and how to send a swab to the laboratory. Essentially, in uncomplicated cases of vaginal discharge a diagnosis can be reached using clinical history, characteristic appearance, and the pH of the discharge. <u>Please note</u> that routine culture for <i>Neisseria gonorrhoeae</i> is no longer conducted. The laboratory now provides PCR for the detection of <i>N. gonorrhoeae</i> . For <i>N. gonorrhoeae</i> testing please send a Cobas PCR <i>Chlamydia</i> swab and make it clear that testing for <i>N. gonorrhoeae</i> is required. One Cobas swab can be used to test for both <i>Chlamydia</i> and <i>N. gonorrhoeae</i> if requested. Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	No
Additional Comments	

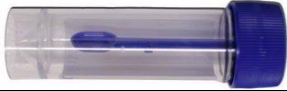
Haemophilus influenzae Type B Ab

This test measures the amount of anti-Hib IgG immunoglobulin (antibody) in the blood.

Investigation	<i>Haemophilus influenzae</i> Type B antibodies
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Sandwell and West Birmingham Hospital Immunology Department.

Helicobacter pylori Antigen Detection


Investigation	<i>Helicobacter pylori</i> antigen detection in stool specimens
Tests	<i>H. pylori</i> antigen testing
Sample type	Fresh or frozen stool samples (no preservatives)

Collection Container	Universal with spoon (blue top) 
Sample collection	Specimen may be passed into a clean, dry, disposable bedpan or similar container and transferred to an appropriate collection container. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	1 day
Limitations	The test is a qualitative assay for <i>H. pylori</i> antigen in stool and does not indicate the quantity of the antigens. A negative result does preclude the possibility of infection with <i>H. pylori</i> .
Out-of-Hours-Testing	No
Additional Comments	<i>H. pylori</i> stool antigen testing is more specific and allows post treatment testing or re-testing if symptoms re-occur despite therapy. The alternative test (if faeces is unacceptable to the patient) is the Urea Breathe Test. This should be arranged through the Gastroenterology Department or via Community prescription at the local pharmacy. Public Health England produces a useful guide on who and when to test for <i>H. pylori</i> : https://www.gov.uk/government/publications/helicobacter-pylori-diagnosis-and-treatment For more guidance on the management of common infection related problems and the appropriateness of sending a specimen to the laboratory for investigation, please visit the PHE website at https://www.gov.uk/government/organisations/public-health-england or https://www.gov.uk/topic/health-protection/infectious-diseases and search for 'quick reference guides'. This will produce several documents primarily aimed at primary care practitioners which have been produced in collaboration with GPs and the Association of Medical Microbiologists (AMM).


Hepatitis A Serology

Hepatitis A IgG test is used to screen for hepatitis past infection or immunity. Positive result indicates exposure at some time.

Hepatitis A IgM test is used for the diagnosis of acute Hepatitis A infection (jaundice in adults).


Investigation	Hepatitis A IgM and IgG
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	5 days
Limitations	Clinical details are essential for processing, especially onset date.
Out-of-Hours-Testing	No
Additional Comments	

Hepatitis A PCR


Investigation	Hepatitis A PCR
Tests	PCR
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Must be hepatitis A positive or equivocal.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Virus Reference Department UKHSA Colindale Reference Laboratory.

Hepatitis B surface Antibody

This test is used to determine if protective immunity has been achieved following immunisation. Low levels of hepatitis B virus surface antibody may be found in patients who have past infection.

Investigation	Hepatitis B surface antibody detection
Tests	Antibody detection (for post vaccination)
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	5 days
Limitations	Vaccination history is required for full interpretation of result. Blood should be tested 6-8 weeks after final dose of Hepatitis B vaccination. Accurate interpretation of this result is reliant upon detailed vaccination history and clinical details.
Out-of-Hours-Testing	No
Additional Comments	


Hepatitis B Core Total Antibody

Investigation	Hepatitis B Core Total Antibody detection
Tests	Antibody detection (acute infection/ evidence of natural immunity)
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal

	working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	5 days
Limitations	Clinical details are essential for processing
Out-of-Hours-Testing	No
Additional Comments	


Hepatitis B Surface Antigen

This test is used for the diagnosis of acute or recent hepatitis B or carrier state.

Investigation	Hepatitis B Surface Antigen detection
Tests	Antigen detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	5-7 days
Limitations	Requests must be clearly indicated.
Out-of-Hours-Testing	No
Additional Comments	


Hepatitis B e Antigen and Antibody and Hepatitis B core IgM

These tests are used to assess infective risk level in acute and chronic hepatitis B virus infections.

Investigation	<ul style="list-style-type: none"> • Hepatitis B e Antigen detection • Hepatitis B e Antibody detection • Hepatitis B core IgM detection
Tests	Antibody/antigen detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	5 days
Limitations	Requests must be clearly indicated. Patient should be Hepatitis B surface antigen positive and/or Hepatitis B core total antibody positive.
Out-of-Hours-Testing	No
Additional Comments	


Hepatitis B DNA Viral load

Investigation	Hepatitis B DNA Viral load
Tests	PCR
Sample type	EDTA blood
Collection Container	Purple top (minimum volume 3 ml)


	
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Requests must be clearly indicated. Patient must be Hepatitis B positive.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.

Hepatitis C Ab

Marker of infection at some time.


Investigation	Hepatitis C Antibody detection
Tests	Detection of Hepatitis C antibody (qualitative).
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	5 days Confirmation of positive result: 10-14 days
Limitations	Requests must be clearly indicated.
Out-of-Hours-Testing	No
Additional Comments	Confirmation of positive results are sent to UKHSA Bristol Reference Laboratory.

Hepatitis C PCR Qualitative


Investigation	Hepatitis C PCR Qualitative
Tests	RNA detection by PCR
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Requests must be clearly indicated.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.

Hepatitis C Genotype


Investigation	Hepatitis C Genotype
Tests	Genotype detection by PCR

Sample type	2 x EDTA blood
Collection Container	Purple top (minimum volume 4 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Requests must be clearly indicated. Patient must be HCV positive with active infection
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.


Hepatitis C Viral Load

Investigation	Hepatitis C Viral Load
Tests	PCR
Sample type	2 x EDTA blood
Collection Container	Purple top (minimum volume 4 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Requests must be clearly indicated.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.

Hepatitis D (Delta agent)



Investigation	Hepatitis D (Delta agent)
Tests	<ul style="list-style-type: none"> • Antibody detection, • PCR.
Sample type	Clotted sample
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Request must be clearly indicated. Must be Hepatitis B positive.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Virus Reference Department UKHSA Colindale Reference Laboratory.

Hepatitis E IgM and IgG


Investigation	Hepatitis E IgM and IgG
Tests	<ul style="list-style-type: none"> • Antibody detection, • PCR.
Sample type	Clotted sample
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	7-10 days if confirmation is required
Limitations	Request must be clearly indicated. ALT needs to be >100
Out-of-Hours-Testing	No
Additional Comments	If sample is positive, it gets sent to the reference laboratory for PCR testing. This test is performed at Virus Reference Department UKHSA Colindale Reference Laboratory.

Herpes Simplex Virus 1 and 2 PCR (Qualitative)

For diagnosis of acute disease.


Investigation	Herpes Simplex virus 1 and 2 PCR
Tests	PCR
Sample type	Viral swab
Collection Container	Green topped swab  Red topped swab 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	False negatives may occur for a variety of reasons, for example inappropriate timing of sample collection, inappropriate sample, presence of organism below the detectable limit of the assay.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.

HIV 1/2 Ab/Ag


Investigation	HIV 1/2 Ab/Ag
Tests	HIV-1 and 2 antibodies and HIV p24 antigen detection(qualitative)
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements.

	Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated. Requests for HIV must be clearly indicated, and the request form signed
Turnaround Time	4 days (May take longer if confirmation is required).
Limitations	
Out-of-Hours-Testing	No
Additional Comments	If sample is positive, it gets sent to UKHSA Bristol Reference Laboratory for confirmation.

HIV Pro-Viral DNA Load


Investigation	HIV Pro-Viral DNA Load
Tests	DNA detection in Infants <1 year old
Sample type	2 x EDTA blood
Collection Container	Peach Pink top (paediatric EDTA sample tube) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10 days
Limitations	Requests for HIV must be clearly indicated, and the request form signed. Sample <u>must</u> be sent <u>with</u> EDTA sample from HIV positive mother.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Virus Reference Department, UKHSA Colindale.

HIV 1 RNA Viral Load


Investigation	HIV 1 RNA Viral Load
Tests	RNA detection in adults and children >1 year old
Sample type	3 x EDTA blood
Collection Container	Purple top (minimum volume 4 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	1-2 days
Limitations	Requests for HIV must be clearly indicated, and the request form signed. Patient MUST be HIV 1 positive.
Out-of-Hours-Testing	No
Additional Comments	

HIV Genotypic Resistance Test

Investigation	HIV Genotypic Resistance Test
Tests	HIV resistance to anti-retroviral therapy
Sample type	10ml EDTA blood


Collection Container	Purple top (minimum volume 4 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated. Please submit the sample with a completed specific <u>Royal Free HIV genotypic resistance test form</u> and <u>Salisbury Microbiology request form</u> .
Turnaround Time	10-14 days
Limitations	Request from GUM clinic ONLY.
Out-of-Hours-Testing	No
Additional Comments	This test is sent to the Royal Free London Reference Laboratory.

HIV-2 Viral Load and HIV-2 Pro-viral testing

Investigation	HIV-2 Viral load and HIV-2 Pro-Viral testing
Tests	PCR
Sample type	<ul style="list-style-type: none"> • 1 x Whole Blood EDTA (4-5mL) • 1 x Whole Blood EDTA for Pro-Viral testing
Collection Container	Purple top (minimum volume 4 ml) 
Sample collection	No special requirements.
Turnaround Time	10-14 days
Limitations	
Out-of-Hours-Testing	No.
Additional Comments	This test is performed at UCLH Department of Clinical Virology Reference Laboratory in Tottenham.

HTLV-1 & HTLV-2 Ab



Used to determine past or current infection.

Investigation	HTLV-1 and HTLV-2 Ab
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days.
Limitations	
Out-of-Hours-Testing	No.
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.

Human Herpes Virus-6 DNA Quantitative PCR




For diagnosis of HHV-6 infection.

Investigation	Human Herpes Virus-6 DNA Quantitative PCR
Tests	PCR

Sample type	<ul style="list-style-type: none"> • Clotted sample • EDTA blood
Collection Container	<p>Yellow top (minimum volume 3.5 ml)</p>  <p>Purple top (minimum volume 4 ml)</p> 
Sample collection	<p>No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.</p>
Turnaround Time	10-14 days
Limitations	False negatives may occur for a variety of reasons, for example inappropriate timing of sample collection, inappropriate sample, presence of organism below the detectable limit of the assay.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Virus Reference Department, UKHSA Colindale

Human Herpes Virus-7 DNA Quantitative PCR


For diagnosis of HHV-7 infection.

Investigation	Human Herpes Virus-7 DNA Quantitative PCR
Tests	PCR
Sample type	<ul style="list-style-type: none"> • EDTA blood • CSF • Serum
Collection Container	<p>Purple top (minimum volume 4 ml)</p>  <p>Yellow top (minimum volume 3.5 ml)</p>  <p>Sterile plastic bijoux container</p> 
Sample collection	<p>No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.</p>
Turnaround Time	10-14 days
Limitations	False negatives may occur for a variety of reasons, for example inappropriate timing of sample collection, inappropriate sample, presence of organism below the detectable limit of the assay.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Virus Reference Department, UKHSA Colindale.



Human Herpes Virus-8 DNA Quantitative PCR

For diagnosis of HHV-8 infection.


Investigation	Human Herpes Virus-8 DNA Quantitative PCR
Tests	PCR

Sample type	EDTA blood
Collection Container	Purple top (minimum volume 4 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	False negatives may occur for a variety of reasons, for example inappropriate timing of sample collection, inappropriate sample, presence of organism below the detectable limit of the assay.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Virus Reference Department, UKHSA Colindale.

Influenza A/B


Investigation	Influenza A/B
Tests	PCR
Sample type	<ul style="list-style-type: none"> Nasopharyngeal swab Nose and throat swab in VTM
Collection Container	Green topped swab  Red topped swab 
Sample collection	Samples should be collected wearing correct PPE. Samples should be double bagged. Do not remove viral transport media from sample container.
Turnaround Time	1 day
Limitations	Requests must be clearly indicated
Out-of-Hours-Testing	No
Additional Comments	

IV Cannula Culture, e.g., CVP line tip

Investigation	IV Cannula Culture, e.g., CVP line tip
Tests	Culture
Sample type	End of cannula tip (end 4 cm) Note: blood culture is preferable
Collection Container	Universal (white top) 
Sample collection	Sample should be collected before antimicrobial therapy started. Disinfect the skin around the cannula entry site, remove cannula using aseptic technique, and cut off 4 cm of the tip into an appropriate CE marked leak proof container using sterile scissors. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.



Turnaround Time	4 days
Limitations	Cannula should only be sent if there is evidence of infection. Where line related infection/sepsis suspected, send blood cultures (central and peripheral taken simultaneously), prior to line removal. Do NOT send line tips if they are being removed routinely and infection is NOT suspected. Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	No
Additional Comments	

Joint Fluid Culture

Investigation	Joint Fluid Culture
Tests	Gram stain, culture and crystals
Sample type	Joint fluid
Collection Container	Universal (white top) 
Sample collection	Samples should be taken using strict aseptic technique in line with Trust procedure. Ideally a minimum volume of 1ml should be collected. Where adequate sample, also inoculate into blood culture bottle set. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	5 days
Limitations	Please indicate if microscopy for crystals is required. Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	Not routinely tested out of hours.
Additional Comments	


Leptospiral serology IgM

Leptospiral PCR

Investigation	<ul style="list-style-type: none"> Leptospiral serology IgM Leptospiral PCR
Tests	<ul style="list-style-type: none"> Antibody detection PCR
Sample type	<ul style="list-style-type: none"> Clotted blood EDTA blood
Collection Container	Yellow top (minimum volume 3.5 ml)  Purple Top (minimum volume 4 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Requests must be clearly indicated. Please state date of onset, nature of symptoms and exposure history are essential for processing.


Out-of-Hours-Testing	No
Additional Comments	This test is sent to PHE Porton Down reference Laboratory.

Lyme (*Borrelia burgdorferi*) IgG and IgM


Investigation	<i>Borrelia burgdorferi</i> IgG and IgM
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	4 days
Limitations	Requests must be clearly indicated. Other samples (e.g., CSF, joint fluid) by arrangement with Consultant Microbiologist only.
Out-of-Hours-Testing	No
Additional Comments	Reactive results are sent to PHE Porton Down Reference Laboratory for Immunoblotting.

Lyme Immunoblot (*Borrelia burgdorferi*)

This test is used to confirm positive Lyme IgG/IgM results.


Investigation	Lyme Immunoblot
Tests	Immunoblot test
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Sample must be Lyme IgG/IgM positive
Out-of-Hours-Testing	No
Additional Comments	This test is performed at PHE Porton Down Reference Laboratory.

Measles Serology IgM





Investigation	Measles Serology IgM
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.

Turnaround Time	10-14 days
Limitations	
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.

Measles Serology IgG




Investigation	Measles Serology IgG
Tests	Antibody detection (evidence of immunity).
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	5 days
Limitations	Requests must be clearly indicated. For acute infection contact local Health Protection Unit (HPU) for oral swab test kit
Out-of-Hours-Testing	No
Additional Comments	

Measles PCR

Investigation	Measles PCR
Tests	PCR
Sample type	<ul style="list-style-type: none"> • Oral fluid, • Throat swabs, • NPA, • CSF (150µl), • Urine, • Tissue.
Collection Container	<p>Green topped viral swab </p> <p>Red topped viral swab </p> <p>Universal (white top) </p> <p>Sterile plastic bijoux container </p>
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days




Limitations	Please contact the laboratory before sending a tissue.
Out-of-Hours-Testing	No
Additional Comments	


Meningococcal PCR

Investigation	Meningococcal PCR
Tests	DNA detection
Sample type	Older children/adults: CSF Young children: EDTA blood
Collection Container	<p>Sterile plastic bijoux container</p>  <p>Purple top (minimum volume 4 ml)</p>  <p>Pink top</p> 
Sample collection	<p>Specimens should be sent to the laboratory without delay during normal working hours.</p> <p>Outside of normal working hours samples should be refrigerated.</p> <p>Where a CSF sample is available, this should be sent in addition to an EDTA blood sample. Clinical details are essential for processing.</p>
Turnaround Time	10-14 days (Positive result will be phoned earlier)
Limitations	Requests must be clearly indicated.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Meningococcal Reference Laboratory, Manchester PHE.


Monkeypox (Mpox) PCR

In the first instance, suspected cases must be discussed with Consultant Microbiologist. Make sure that the request form indicates the risk factors and the reason that Mpox is suspected.




Investigation	Monkeypox PCR
Tests	PCR
Sample type	<ul style="list-style-type: none"> • Viral swab, • EDTA, • Throat swab in VTM, • Urine.
Collection Container	<p>Green topped swab</p>  <p>Red topped swab</p>  <p>Purple top (minimum volume 4 ml)</p>  <p>Universal (White top)</p>

	
Sample collection	Collect specimens as per normal procedure. Specimens should be double bagged, with the request form in the outer bag. Specimens should be sent to the laboratory without delay.
Turnaround Time	10-14 days
Limitations	Suspected cases need to be discussed with the Consultant Microbiologist first.
Out-of-Hours-Testing	No.
Additional Comments	This test is performed at RIPL UKHSA Reference Laboratory.

Mouth Swab Culture


Investigation	Mouth Swab Culture
Tests	Culture
Sample type	Mouth swab
Collection Container	Transport swab (black top) 
Sample collection	Optimally collected before antimicrobial therapy started. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	4 days
Limitations	Culture directed to <i>Candida</i> sp. (For herpes simplex please refer to virology section). Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	No
Additional Comments	

MRSA Culture


Investigation	MRSA Culture
Tests	Culture
Sample type	<ul style="list-style-type: none"> • Swab, • Urine, • Sputum.
Collection Container	Transport swab (Black topped)  Universal (White top)  Universal (60ml wide-mouth, metal top) 
Sample collection	No special requirements.

	Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	Negative: 1 – 2 days Positive: 2-4 days
Limitations	Culture directed to MRSA only. See Trust MRSA Policy. Axilla & throat swabs are not accepted. Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	No
Additional Comments	

Mumps Serology IgG



Investigation	Mumps Serology IgG
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	5 days
Limitations	Requests must be clearly indicated.
Out-of-Hours-Testing	No
Additional Comments	

Mumps Serology IgM



Investigation	Mumps IgM
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Requests must be clearly indicated. For acute infection contact local Health Protection Unit (HPU) for oral swab test kit.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Virus Reference Department UKHSA Colindale Reference Laboratory.

Mumps PCR

Investigation	Mumps PCR
Tests	PCR






Sample type	Mouth/throat swab
Collection Container	Green topped swab  Red topped swab 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Clinical details are essential. Please state vaccination history.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Virus Reference Department, Colindale Reference Laboratory

Mycobacterium tuberculosis Fast Track



Investigation	<i>M. tuberculosis</i> Fast Track test
Tests	Detection of <i>M. tuberculosis</i> complex by molecular amplification techniques
Sample type	<ul style="list-style-type: none"> • CSF (min 0.5mL Whole CSF), • Wax blocks (for wax blocks, an annotated diagram or slide is required indicating the area where AFB were seen, or testing should be performed from). • Sputum
Collection Container	Sterile plastic bijoux container  Universal (60ml wide-mouth, metal top) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	
Out-of-Hours-Testing	No
Additional Comments	This test is performed at National Mycobacterium Reference Service – South (NMRS – South) PHE Colindale Reference Laboratory. To be discussed with consultant Microbiologist before being requested

Mycoplasma genitalium PCR


Investigation	Detection of <i>Mycoplasma genitalium</i> rRNA
Tests	PCR

Sample type	<ul style="list-style-type: none"> • Swab in VTM media, • Cobas media, • Urine (in green tube or sterile universal container).
Collection Container	<p>Green topped swab</p>  <p>Red topped swab</p>  <p>Cobas transport media (swab)</p>  <p>Cobas transport media (for urine)</p>  <p>Universal (White top)</p> 
Sample collection	<p>No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.</p>
Turnaround Time	10-14 days
Limitations	
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Colindale Bacteriology (BRD Colindale) Reference Laboratory.


Neonatal Screen Culture

Investigation	Neonatal Screen Culture
Tests	Culture
Sample type	<ul style="list-style-type: none"> • Swabs • Gastric aspirate
Collection Container	<p>Transport swab (black top)</p>  <p>Universal container</p> 
Sample collection	<p>No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.</p>
Turnaround Time	4 days
Limitations	Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	No
Additional Comments	


Non-indigenous mycoses (e.g., *Histoplasma*) serology

Investigation	Non-indigenous mycoses serology
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Travel history is essential.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Mycology Reference Laboratory.

Nose Swab Culture

Investigation	Nose Swab Culture
Tests	Culture
Sample type	Nose swab
Collection Container	Transport swab (black top) 
Sample collection	Optimally collected before antimicrobial therapy started. No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	4 days
Limitations	Nasal swabs should NOT be taken to investigate the presence of <i>Bordetella pertussis</i> . Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	No
Additional Comments	

Parasitology Investigation

Investigation	Parasitology
Tests	Microscopy
Sample type	Faeces
Collection Container	Universal with spoon (blue top) 
Sample collection	Specimen may be passed into a clean, dry, disposable bedpan or similar container and transferred to an appropriate collection container. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	6 days


Limitations	Please contact Laboratory if 'hot-stool' examination is required
Out-of-Hours-Testing	No
Additional Comments	

Parasitology investigation for *Enterobius vermicularis*

Investigation	Microscopy for <i>Enterobius vermicularis</i>
Tests	Microscopy
Sample type	<ul style="list-style-type: none"> Sellotape slide, Perianal swab.
Collection Container	<u>Laboratory no longer supplies collection kits.</u> <ul style="list-style-type: none"> Sellotape slide, Cotton-wool swab in dry container.
Sample collection	<p>Sellotape slide Apply clear Sellotape to the perianal region, pressing the adhesive side of the tape firmly against the left and right perianal folds several times; the tape can be wrapped around a tongue depressor to aid specimen collection. Smooth the tape back on the slide, adhesive side down.</p> <p>Perianal swab Perianal specimens are best obtained in the morning before bathing or defecation. Three specimens should be taken on consecutive days before pinworm infection is ruled out. Cotton-wool swab in dry container should be used for collection. Spread buttocks apart and rub the moistened cotton wool swab over the area around the anus, but do not insert into the anus. Place cotton wool swab back in its container (no transport medium required). Occasionally, an adult worm may be collected from a patient and sent in saline or water for identification. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.</p>
Turnaround Time	6 days
Limitations	
Out-of-Hours-Testing	No
Additional Comments	


Parasite disease serology

Various including *Schistosoma*, Amoebic (abscess), *Toxocara*, etc.



Investigation	Serology for various parasites including <i>Schistosoma</i> , Amoebas (abscess), <i>Toxocara</i> , etc.
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Clinical details including countries visited & dates are essential.

	Contact duty Consultant Microbiologist if required.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Department of Clinical Parasitology (UCLH) Health Services Reference Laboratory.


Parvovirus B19 IgG and IgM Serology

Investigation	Parvovirus Serology
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Clinical details are essential for processing.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.

Parvovirus B19 PCR



Investigation	Parvovirus B19 PCR
Tests	PCR
Sample type	<ul style="list-style-type: none"> • EDTA, • Serum.
Collection Container	Purple top (minimum volume 4 ml)  Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.

Pleural Fluid Culture


Investigation	Pleural Fluid Culture
Tests	Gram stain & Culture
Sample type	Pleural fluid
Collection Container	Universal (white top) 
Sample collection	No special requirements.

	Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	5 days
Limitations	Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	No
Additional Comments	


Pneumococcal PCR

Investigation	Pneumococcal PCR
Tests	DNA detection
Sample type	EDTA blood and/or CSF
Collection Container	Purple top for blood (minimum volume 4 ml)  Sterile plastic bijoux container 
Sample collection	Dispense CSF (minimum 0.5ml in each bottle) into single use containers and label in order. CSF specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception and the on-call Microbiology Biomedical Scientist contacted through switchboard. No special requirements for EDTA samples. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days (positive result will be phoned earlier).
Limitations	Requests must be clearly indicated.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at PHE Manchester reference laboratory.


Pneumococcal Serology

Investigation	<i>Streptococcus pneumoniae</i> antibody detection
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Sandwell and West Birmingham Hospital Immunology Department.


Pus Culture

Investigation	Pus Culture
Tests	Gram stain & Culture
Sample type	Pus
Collection Container	Universal (white top) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	5 days
Limitations	Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	No
Additional Comments	

Q-Fever


Investigation	Coxiella burnetii (Q Fever) serology
Tests	Elisa screen for IgG and IgM
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Please ensure that an onset date for symptoms is given within the clinical details of the electronic or hand-written request form.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Rare and Imported Pathogens Laboratory (RIPL) Laboratory.

Rabies Serology



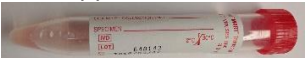
Investigation	Rabies antibody detection
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal

	working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Vet Lab Reference Laboratory, Weybridge.


Rotavirus EIA

Investigation	Rotavirus EIA
Tests	Antigen detection
Sample type	Faeces
Collection Container	Universal with spoon (blue top) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	1 day
Limitations	Limited to children who are less than 5 years old.
Out-of-Hours-Testing	No
Additional Comments	


RSV Detection

Investigation	RSV detection
Tests	PCR
Sample type	<ul style="list-style-type: none"> Nasopharyngeal aspirate, Viral swab.
Collection Container	Trap bottle  Green topped swab  Red topped swab 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	1 day
Limitations	Clinical details are essential for processing
Out-of-Hours-Testing	No
Additional Comments	

Rubella Serology


Investigation	Rubella Serology IgG/IgM
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	5 days
Limitations	Clinical details are essential for processing.
Out-of-Hours-Testing	No
Additional Comments	

Schistosoma Serology

Investigation	Schistosoma antibody detection
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No specimen requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	Please state travel history or other relevant clinical details.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at the Department of Clinical Parasitology (UCLH) Health Services Reference Laboratory.


Skin Swab Culture

The skin is colonised by normally non-harmful flora. When the skin is broken because of trauma, burns, bites or surgical procedures, colonisation with a range of bacteria may occur. Infections of the skin and subcutaneous tissues are caused by a wide range of organisms; however the majority are caused by *Staphylococcus aureus* and β haemolytic streptococci groups A, C and G. Microbiological cultures help to establish the causative organism enabling antibiotic sensitivity testing which is essential to ensure optimal treatment regimens.

Investigation	Skin Swab Culture
Tests	Culture
Sample type	Skin swab
Collection Container	Transport swab (black top) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours.

	Outside of normal working hours samples should be refrigerated.
Turnaround Time	4 days
Limitations	Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	No
Additional Comments	


Sputum Culture

Investigation	Sputum Culture
Tests	Culture
Sample type	Sputum
Collection Container	Universal (60ml wide-mouth, metal top) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	4 days
Limitations	If fungal culture required e.g., in an immuno-compromised patient, please indicate on request form. Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	No
Additional Comments	

Staphylococcus and Streptococcus Reference Service (and PVL)


Investigation	Staphylococcus and Streptococcus Reference Service including PVL testing
Tests	Genotyping, Toxin detection, etc.
Sample type	Pure culture
Collection Container	N/A
Sample collection	N/A
Turnaround Time	10-14 days
Limitations	Consultant Microbiologist will decide which isolates need to be sent for further investigation.
Out-of-Hours-Testing	No
Additional Comments	These tests are performed at UKHSA Colindale Bacteriology Reference Laboratory.

Syphilis Serology



Investigation	Syphilis antibody detection.
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements.

	Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	4 days, longer if the sample is positive and needs sending to the reference laboratory for confirmation.
Limitations	Clinical details are essential for processing.
Out-of-Hours-Testing	No
Additional Comments	Positive in-house samples are sent to UKHSA Bristol Reference Laboratory for full confirmation.

Syphilis IgM, RPR, TPPA, alternative EIA and Immunoblots


Investigation	Syphilis IgM, RPR, TPPA, alternative EIA and Immunoblots
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	5-7 days (Longer if sample needs to be sent to Reference Laboratory).
Limitations	
Out-of-Hours-Testing	No
Additional Comments	If sample is positive, it is sent to UKHSA Bristol Reference Laboratory for confirmation.

Syphilis PCR


Investigation	Syphilis PCR
Tests	Detection of <i>Treponema pallidum</i> DNA
Sample type	Swab in viral transport media
Collection Container	Green topped swab  Red topped swab 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	
Out-of-Hours-Testing	No
Additional Comments	This test is performed at PHE Colindale (STBRU) Reference Laboratory.

TB Culture (Urine)


Investigation	TB Culture (Urine)
Tests	Culture
Sample type	First-pass early morning urine (from 3 consecutive days)

Collection Container	Universal (60ml wide-mouth, metal top) 
Sample collection	3 specimens should be sent from 3 consecutive days. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours specimens should be refrigerated.
Turnaround Time	6 weeks
Limitations	No microscopy performed on urine TB samples
Out-of-Hours-Testing	No
Additional Comments	This test is currently performed at Southampton General Hospital.

TB Culture (Sputum/ BAL/ Tissue/ Pus)


Investigation	TB Culture (Sputum/ BAL/ Tissue/ Pus)
Tests	Microscopy & Culture
Sample type	<ul style="list-style-type: none"> • Sputum • BAL • Tissue • Pus
Collection Container	Universal (60ml wide-mouth, metal top) 
Sample collection	Sputum specimens should be collected early morning. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours specimens should be refrigerated.
Turnaround Time	2 days for microscopy. 6 weeks for culture.
Limitations	Please do not send samples in formalin.
Out-of-Hours-Testing	No
Additional Comments	This test is currently performed at Southampton General Hospital.

TB (*Mycobacterium tuberculosis*) T-SPOT


Investigation	TB (<i>Mycobacterium tuberculosis</i>) T-SPOT
Tests	Gamma interferon test
Sample type	X2 Lithium blood
Collection Container	Green top (minimum volume 5 ml) 
Sample collection	Specimens not to be refrigerated. Specimens should be sent to the laboratory without delay. Sample volume: <ul style="list-style-type: none"> • Patient <2 years old: 2mL • Patient 2-10 years old: 4 mL

	<ul style="list-style-type: none"> • Patient >10 years old: 6 mL
Turnaround Time	24-48 hrs
Limitations	On agreement by Consultant Microbiologist only. Clinical details are essential for processing. Monday to Friday ONLY. Must be accompanied by Revvity Reference Laboratory request form. Samples must arrive in lab by 16:00 hrs and have been taken that morning.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Revvity Reference Laboratory, Oxford.

Tetanus Serology


Investigation	Tetanus IgG antibody detection
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days
Limitations	
Out-of-Hours-Testing	No
Additional Comments	This test is performed at Sandwell and West Birmingham Hospital Immunology Department or Manchester UKHSA Vaccine Evaluation Unit.

Throat Swab Culture


Investigation	Throat Swab Culture
Tests	Culture
Sample type	Throat swab
Collection Container	Transport swab (black top) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	4 days, longer if prolonged culture is required (for persistent/recurrent sore throats)
Limitations	Isolation of <i>Neisseria</i> spp. only on request. Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	No
Additional Comments	

Tissue Culture

Investigation	Tissue Culture
Tests	Gram stain & Culture


Sample type	Tissue
Collection Container	Universal (white top) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	7 days
Limitations	Please do not send samples in formalin. Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	No
Additional Comments	

Toxoplasma gondii Serology


Investigation	<i>Toxoplasma gondii</i> antibody detection
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	5 days, longer if confirmation of positive result is required.
Limitations	Clinical details are essential for processing
Out-of-Hours-Testing	No
Additional Comments	Confirmation of positive results sent to Swansea Hospital.

Tropical Disease Serology (Regional Travel Screen)




Various including Dengue, Viral haemorrhagic fevers, etc.

Investigation	Tropical disease (e.g., Dengue, VHF, etc.) antibody detection
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	7-14 days
Limitations	Clinical details including countries visited & dates are essential. Vaccinations & antibiotics given are essential as may affect test results. Contact duty Consultant Microbiologist if required
Out-of-Hours-Testing	No
Additional Comments	This test is performed at PHE Porton Down Reference Laboratory.



Ulcer Swab


Investigation	Ulcer Swab
Tests	Culture
Sample type	Ulcer swab
Collection Container	Transport swab (black top) 
Sample collection	Specimens should be collected before antimicrobial therapy started. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	4 days
Limitations	Routine swabbing is unnecessary unless there is a clinical indication of infection. Delays in transportation may affect the recovery of pathogens.
Out-of-Hours-Testing	No
Additional Comments	

Urine Antigen Tests: Pneumococcal and Legionella


Investigation	Detection of <i>Legionella pneumophila</i> serogroup 1 and <i>Streptococcus pneumoniae</i> antigen in urine
Tests	Antigen detection
Sample type	Urine
Collection Container	Universal (white top) or  yellow top urine collection tubes  Green top tube with boric acid. 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	1 day
Limitations	Please contact Laboratory if urgent processing is required.
Out-of-Hours-Testing	No
Additional Comments	

Urine Culture

Investigation	Urine Culture
Tests	Microscopy & Culture
Sample type	Urine
Collection Container	Green top tube with boric acid.  Container without boric acid 

	Universal (white top) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	4 days
Limitations	Please state in clinical details: <ul style="list-style-type: none"> • Sample type: MSU/ CSU/ SPA/ Bag/ Ileal conduit sample. • Antibiotic use (recent and/or intended): helps with interpretation of results and guides further work up.
Out-of-Hours-Testing	No
Additional Comments	<p>DO NOT USE DIPSTICKS TO SCREEN CATHETER SAMPLES. Catheters will invariably be colonised with bacteria and the presence of a catheter may induce pyuria without the presence of infection. Therefore, dipstick testing should not be used as an aid to the diagnosis of UTI in catheterised patients. Clinical criteria in this instance should be used to judge whether a patient has an infection.</p> <p>Please give relevant clinical information which suggests why UTI is suspected. Listing of dipstick tests alone does not count as adequate clinical details since the tests may be positive for other reasons, e.g., blood during menstruation, urethritis, etc.</p> <p>Routine urine culture is not required to manage uncomplicated lower UTI in women but should be reserved for those women with recurrent urinary tract infection, complicated UTI or those who have not responded to empirical therapy (usually trimethoprim or nitrofurantoin). Delays in transportation may affect the recovery of pathogens.</p> <p>For more detail guidance, please refer to: https://www.gov.uk/government/publications/urinary-tract-infection-uti-diagnosis</p>


Urinary Parasitology (Schistosomiasis)

Investigation	Microscopy for <i>Schistosoma haematobium</i>
Tests	Microscopy
Sample type	Urine
Collection Container	Universal (white top) 
Sample collection	Please collect the sample around 10AM – 2PM after 15 minutes of light exercise. Ideally, a minimum volume of 10mL is required.
Turnaround Time	5 days
Limitations	In urinary schistosomiasis, very few ova are present in the urine. The number of ova in the urine varies throughout the day, being highest in urine obtained between 10am and 2pm. In patients with haematuria, eggs may be found trapped in the blood and mucus in the terminal portion of the urine specimen. It is therefore preferable to obtain total urine collected over the time period between 10am and 2pm.



	Alternatively, a 24hr collection of terminal samples of urine may be helpful. Sterile containers without boric acid must be used.
Out-of-Hours-Testing	No
Additional Comments	


Varicella zoster Serology (Chickenpox)

This test is used to determine past chickenpox infection (or vaccination). It indicates immunity.


Investigation	<i>Varicella zoster</i> IgG antibody detection.
Tests	Antibody detection
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	5 days normal 1 day (urgent)
Limitations	Please contact Laboratory if urgent processing is required. Please state date of contact.
Out-of-Hours-Testing	Saturday/ Sunday/ Bank Holiday morning (by arrangement only).
Additional Comments	When requesting <i>Varicella zoster</i> antibody following contact with chickenpox in both pregnant women and immunocompromised patients it is essential that the date the patient was in contact with the chickenpox case is stated in the clinical details as well as the onset date of the chickenpox case's rash as these are used to assess the value of <i>Varicella Zoster</i> Immunoglobulin (VZIG) in every case. Please contact the laboratory in such cases so that the samples can be tested urgently on arrival. This is particularly important on Fridays, weekends, and Bank Holidays when staffing is reduced. Please include contact number (bleep or extension) so the result could be telephoned through to the clinician. For non-immune contacts, VZIG is only available if the result is known less than 10 days after contact, otherwise other therapeutic options may be required.

Varicella zoster PCR

Investigation	Detection of <i>Varicella zoster</i> DNA
Tests	PCR
Sample type	<ul style="list-style-type: none"> • Viral swab • CSF • Whole EDTA
Collection Container	Green topped swab  Red topped swab  Sterile glass bijoux container



	 <p>Purple top (minimum volume 4 ml)</p>
Sample collection	For screening, swab should be taken from the affected site. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	10-14 days.
Limitations	Please provide sufficient and relevant clinical details (e.g., vesicular rash, shingles).
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.

Wound Swab Culture

Investigation	Wound Swab Culture
Tests	Culture
Sample type	Wound swab
Collection Container	Transport swab (Black top) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	4 days
Limitations	<p>Pus sample should be sent ideally (in a white topped universal). Delays in transportation may affect the recovery of pathogens. Please note that chronic wounds and ulcers will invariably be colonised with organisms and the presence of bacterial growth does not necessarily indicate infection is present.</p> <p>Leg ulcers: Please only send swabs if there is clear evidence of infection, e.g., spreading erythema around the ulcer, new pus, cellulitis, increasing pain.</p> <p>Before sampling remove colonising organisms by washing with sterile saline. Use swab to get deep to the ulcer base and under any over-hanging edges.</p> <p>Please provide description of any clinical signs to aid interpretation of results.</p>
Out-of-Hours-Testing	No
Additional Comments	Please refer to the PHE guidance on when it is appropriate to take and submit swabs from leg ulcers at: https://www.nice.org.uk/guidance/ng152


Zika Virus Serology

Investigation	Detection of Zika virus antibodies
Tests	Antibody detection (IgG & IgM)
Sample type	<ul style="list-style-type: none"> Clotted blood


	<ul style="list-style-type: none"> Urine (minimum volume 1 mL)
Collection Container	<p>Yellow top (minimum volume 3.5 ml)</p>  <p>Universal (white top)</p> 
Sample collection	<p>No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.</p>
Turnaround Time	10-14 days
Limitations	For further guidance, please refer to: Zika virus: sample testing advice - GOV.UK (www.gov.uk)
Out-of-Hours-Testing	No
Additional Comments	This test is performed at PHE Porton Down (RIPL) Reference Laboratory.

ANTIBIOTIC ASSAYS

Gentamicin Levels


Investigation	Gentamicin Level
Tests	Antibiotic assay
Sample type	Clotted blood
Collection Container	<p>Yellow top (minimum volume 3.5 ml)</p> 
Sample collection	<p>No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated. Please use a green biochemistry request form.</p>
Turnaround Time	1 day
Limitations	<p>Timing of sample, and drug dose and timing regimen essential for interpretation of result Refer to gentamicin guidelines on MICROGUIDE</p>
Out-of-Hours-Testing	Yes (must be arranged with on call biomedical scientist in Laboratory Medicine).
Additional Comments	This test is performed in Laboratory Medicine.

Tobramycin Levels

Investigation	Tobramycin Levels
Tests	Antibiotic assay
Sample type	Clotted blood
Collection Container	<p>Yellow top (minimum volume 3.5 ml)</p> 
Sample collection	<p>No special requirements. Specimens should be sent to the laboratory without delay during normal working hours.</p>


	Outside of normal working hours samples should be refrigerated. Please use a black microbiology request form.
Turnaround Time	2-3 days for verbal result, 7 – 10 days for electronic report.
Limitations	Timing of sample, and drug dose and timing regimen essential for interpretation of result. Please make sure that you complete the request form fully and provide dosing details.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.

Amikacin Levels

Investigation	Amikacin Levels
Tests	Antibiotic assay
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated. Please use a black microbiology request form.
Turnaround Time	2-3 days for verbal result, 7 – 10 days for electronic report.
Limitations	Timing of sample, and drug dose and timing regimen essential for interpretation of result. Please make sure that you complete the request form fully and provide dosing details.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.

Vancomycin Levels


(Pre dose only unless requested by Microbiologist)

Investigation	Vancomycin Levels
Tests	Antibiotic assay
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated. Please use a green biochemistry request form.
Turnaround Time	1 day
Limitations	Timing of sample, and drug dose and timing regimen essential for interpretation of result. Refer to vancomycin guidelines on MICROGUIDE.
Out-of-Hours-Testing	Yes - during daytime at weekends. (Must be arranged with on call biomedical scientist in Laboratory Medicine).


Additional Comments	This test is performed in Laboratory Medicine.
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Teicoplanin level


(Pre dose only as advised by Microbiologist)

Investigation	Teicoplanin level
Tests	Antibiotic assay
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated. Please use a black microbiology request form.
Turnaround Time	2-3 days for verbal result, 7 – 10 days for electronic report
Limitations	Timing of sample, and drug dose and timing regimen essential for interpretation of result. Please make sure that you complete the request form fully and provide dosing details.
Out-of-Hours-Testing	No – unless agreed before the weekend with Consultant Microbiologist
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.

Other antibiotic level, e.g., Co-trimoxazole

Investigation	Other antibiotic level, e.g., Co-trimoxazole
Tests	Antibiotic assay
Sample type	Clotted blood
Collection Container	Yellow top (minimum volume 3.5 ml) 
Sample collection	No special requirements. Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated.
Turnaround Time	2-3 days for verbal result, 7 – 10 days for electronic report
Limitations	Timing of sample, and drug dose and timing regimen essential for interpretation of result Pre-arrangement with Consultant Microbiologist ONLY. Please make sure that you complete the request form fully and provide dosing details.
Out-of-Hours-Testing	No
Additional Comments	This test is performed at UKHSA Bristol Reference Laboratory.

Anti-fungal drug level

Investigation	Anti-fungal drug level
Tests	Anti-fungal assay
Sample type	Red top serum tube (Non-separator)
Collection Container	Red top 
Sample collection	No special requirements.

	Specimens should be sent to the laboratory without delay during normal working hours. Outside of normal working hours samples should be refrigerated. Please use a black microbiology request form.
Turnaround Time	2-3 days for verbal result, 7 – 10 days for electronic report.
Limitations	Timing of sample, and drug dose and timing regimen essential for interpretation of result. Pre-arrangement with Consultant Microbiologist ONLY. Please make sure that you complete the request form fully and provide dosing details.
Out-of-Hours-Testing	No
Additional Comments	These tests are done at Bristol UKHSA Mycology Laboratory.

FAMILY PLANNING

Sub-fertility semen analysis

Semen analysis is the microscopic examination of the semen to see how many sperm cells there are and whether they function correctly.

Investigation	Sub-fertility semen (Andrology)
Tests	Microscopy (analysis of cells and cell count)
Sample type	Semen sample
Collection Container	Universal (Non-Toxic specimen container - contact laboratory)
Sample collection	The sample needs to be collected in the morning. Patient must abstain from sexual activity for 48 hours (but no longer than 7 days) before collecting the sample. Sample should be collected into the provided container (it can be collected from GP or fertility specialist). Sample should be collected by masturbation and the entire specimen should be collected into the container. Please do not use a sheath or condom for collection as they are harmful to sperm. After the collection, please keep the sample close to the body whilst travelling as sperm is sensitive to temperature changes. To ensure the test results will be accurate, please aim to deliver the sample within 1 hour of its production.
Turnaround Time	7 days
Limitations	Samples by appointment only (patient to contact laboratory). Fresh sample taken on day of submission. To arrive within 1 hour of being taken.
Out-of-Hours-Testing	No
Additional Comments	Please note: Patient leaflets with instructions on how to take samples for Sub-fertility (Semen analysis) samples are available on the Salisbury NHS Foundation Trust MICROGUIDE web site at: Diagnostic Semen Analysis (Male Fertility Testing) (microguide.global) The department runs a weekly andrology clinic on Wednesday mornings. There are 6 appointment slots available per week except for days where bank holidays occur. Please ring the laboratory on extension 4099 or 4105 to make an appointment prior to sample collection. Patients providing semen samples for Fertility assessment attend with their samples and complete a questionnaire to ensure the Andrology service

	<p>complies with UKAS quality requirements.</p> <p>Please notify the laboratory if you are unable to attend your appointment so that the appointment slot can be offered to other patients where possible.</p> <p>Please ensure that patients attending for Fertility tests are provided with a completed black Microbiology form PLUS a suitable non-toxic wide-mouthed sterile container to permit the complete semen sample to be captured by the patient. The laboratory provides assembled “collection packs” for Fertility patients which are available at all surgeries/ clinics. If replacement packs are required, please ring (01722) 429105 to request replacements.</p> <p>We advise that the requesting clinician goes through the process with the patient at the time the form and container are supplied to ensure the patient understands when and how to collect the sample. This will help to ensure complete semen sample collection and therefore improve the accuracy of the test.</p> <p>Samples received in alternative containers to the issued sterile non-toxin containers will NOT be processed.</p> <p>Fertility is a multi-factorial state and it is advised that the semen test result should be read whilst taking into account other physical and physiological factors affecting a couple’s fertility.</p>
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Post vasectomy semen analysis

Post-vasectomy semen analysis is the test done by the laboratory to confirm that “No sperms are seen”, however, this test does NOT exclude presence of a very small number of sperms in the sample provided.

Investigation	Post vasectomy semen analysis
Test	Microscopy
Sample type	Semen sample
Collection Container	Universal (Non-Toxic specimen container-contact laboratory)
Sample collection	The sample needs to be collected in the morning. Patient must abstain from sexual activity for 48 hours (but no longer than 7 days) before collecting the sample. Sample should be collected into the provided container (it can be collected from GP). Sample should be collected by masturbation and the entire specimen should be collected into the container. Please do not use a sheath or condom for collection as they are harmful to sperm. After the collection, please keep the sample close to the body whilst travelling.
Turnaround Time	3-4 days
Limitations	Fresh sample taken on day of submission. To arrive in Lab between 09:00 and 12:00
Out-of-Hours Testing	No
Additional Comments	<p>Post vasectomy samples can be submitted any weekday (Monday – Friday) except bank holidays. Patients are asked to bring their samples to the pathology reception desk on level 3. No appointment is required.</p> <p>Please note: Patient leaflets with instructions on how to take samples for post-vasectomy samples are available on the Salisbury NHS Foundation Trust MICROGUIDE web site at: post-vasectomy-for-printing-april-2020.docx (live.com)</p> <p>Please ensure that patients attending for post-vasectomy testing are provided with a completed black Microbiology form PLUS a suitable non-</p>

	<p>toxic wide-mouthed sterile container to permit the complete semen sample to be captured by the patient.</p> <p>We advise that the requesting clinician goes through the process with the patient at the time the form and container are supplied to ensure the patient understands when and how to collect the sample. This will help to ensure complete semen sample collection and therefore improve the accuracy of the test.</p>
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