

A guide to the use of the Virology Laboratory NGH.

For further information on any test please use the online handbook analyte search facility.

Virology Samples.

Specimens must be either accompanied by an appropriate Virology Request form or be labelled with the appropriate ICE ward order label. The specimen MUST also be labelled in compliance with Laboratory Medicine Minimum Acceptance Criteria.
All Samples MUST be labelled with First name, Surname, DOB and Hospital Number/NHS number. N.B. the use of Hospital addressograph or addressograph size labels on blood samples is prohibited.
All Request forms MUST be completed with First name, Surname, DOB, sex, Hospital Number/NHS number, Consultant/GP, Location, requesting physician (please include a bleep or relevant ward telephone number) and relevant clinical details including onset date, diagnosis and if a contact, the nature and length of contact.
Please help us to help you by providing all relevant clinical details and where appropriate travel history.
Failure to comply with above requirements will result in samples not being analysed
Please Contact Laboratory if urgent tests are required as URGENT TESTS WILL ONLY BE DONE BY PRIOR ARRANGEMENT WITH THE LABORATORY.

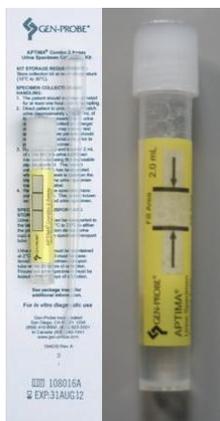
Chlamydia and GC screening Sample collection kits

Urine 3ml first void urine in Hologic APTIMA COMBO 2 Urine SCD kit alternatively a Plain sterile universal may be used but the sample must then be re-refrigerated if not received in the laboratory within 4 hours – Do not use boric acid containers)

Swabs Hologic APTIMA COMBO 2 Unisex Swab SCD kit or APTIMA Vaginal Swab Collection Kit.

All Chlamydia specimen collection devices are available from NGH Virology, NGH/RHH Materials Management and STH GP supplies

Urine SCD



Vaginal SCD



Unisex SCD
(endocervical, eye rectal, pharyngeal, urethral etc)



Hard copy issued by:
Signature in red:

- 1 -

Copy No.

Date:

Virology, Viral and bacterial Serology, Molecular Virology and Direct antigen detection Sample collection devices



Clotted Blood Samples

4-7 ml of clotted blood in a sterile container, preferably in a Serum Separation Tube (SST). Ensure there is no blood contaminating the outside of the container. Specimens from patients known or suspected of infection with Hepatitis B, Hepatitis C, HIV and HTLV I+II should be appropriately labelled and marked with category 3 labels.

Acute samples <5 days post onset. Convalescent >10 days post onset.



Whole Blood / EDTA Blood - Tube must be inverted 8 times to ensure mixing of anticoagulant (EDTA) with blood to prevent clotting.

Ensure there is no blood contaminating the outside of the container. Specimens from patients known or suspected of infection with Hepatitis B, Hepatitis C, HIV and HTLV I+II should be appropriately labelled and marked with category 3 labels



Saliva swabs

Oracol swabs – available from Laboratory at NGH.
Follow instructions enclosed.



Dried Blood Spot

Blood Spot Saver cards – Available from Virology NGH.
Follow instructions enclosed



Swabs

Use only **Green** or **Blue** Topped Virocult swabs.



CSF

Plain Sterile Plastic Universal. (White Lid)

Faeces

Non-sterile plastic universal (blue Lid) with spoon.

Nasopharyngeal Aspirates

Plain Sterile Plastic Universal. (White Lid)
Rinse vacuum trap into a dry universal with 2-4ml sterile saline.

Urine

Min 5ml In a plain, dry, sterile plastic universal (white Lid) or Z10 container. (White Lid)
(NOT BORIC ACID – Red Lid)

Guidance on Virology and Serology Investigations

Relevant Clinical information and date of onset **MUST** always be stated on request form. For some serological assays paired sera (acute and convalescent) are required.

The actual number and type of assays performed on each sample is dependant upon the clinical details given on the request form.

Laboratory MUST be contacted PRIOR to sending urgent requests.

	Sample	Transport container	Test Performed
Chlamydia and GC Screen	Genital Swab	Specific Chlamydia Swabs	Hologic Aptima combo 2 Chlamydia and GC NAAT + relevant confirmatory tests as required
	Early Morning Urine	Specific Urine Tube	
	Conjunctival Swab	Specific Chlamydia Swab	
	Medico-legal case	Contact Laboratory	
CNS Infections	CSF	Plain Sterile Container	HSV / VZV / Enterovirus PCR other Viral PCR's as appropriate
	Acute and Convalescent Sera	Clotted Blood (5ml SST)	Serology - Dependant upon clinical symptoms provided.
Eye Infections	Conjunctival Swab	Virocult Viral Swab	HSV / Adenovirus PCR
	Conjunctival Swab	Specific Chlamydia Swabs	Chlamydia NAT
	Tissue sample From invasive eye disease	Plain Sterile Plastic Universal + 1ml Sterile saline	HSV / Adenovirus PCR
Congenital Infection (Neonate)	Urine (< 3 weeks old)	Plain sterile plastic universal	CMV PCR
	Serum Sample	Clotted Blood	Rubella, CMV Parvovirus Toxoplasma
	CSF/NPA/Stool	Plain sterile plastic universal	Contact Laboratory
	Whole Blood	EDTA Blood (5ml EDTA)	Contact Laboratory
Suspected Infection in Pregnancy	Serum Sample	Clotted Blood (5ml SST)	Rubella, CMV Parvovirus Toxoplasma
Measles	Throat swab and Urine (<5 days post onset)	Virocult swab Plain sterile plastic universal	PCR.
	Acute Serum (5-14 days post onset)	Clotted Blood Sample (5ml SST)	Specific IgM antibody Assay
	Convalescent serum (>14 days Post Onset)	Clotted Blood sample (5ml SST)	Specific IgG antibody Assay
Mumps	Throat/Buccal swab and Urine (<5 days post onset)	Virocult swab Plain sterile plastic universal	Viral Culture.
	Acute Serum (5-14 days post onset)	Clotted Blood Sample (5ml SST)	Specific IgM antibody Assay
	Convalescent serum (>14 days Post Onset)	Clotted Blood sample (5ml SST)	Specific IgG antibody Assay
Rash Vesicular	Vesicle Swab	Virocult Viral Swab	HSV / VZV / Enterovirus PCR
Rash Non vesicular	Serum	Clotted Blood (5ml SST)	Refer to Laboratory

Gastrointestinal Infections	Faeces	Plain Sterile Plastic Universal	Contact Laboratory
	Vomit – (Norovirus Only)	Plain Sterile Plastic Universal	Contact Laboratory
Respiratory Infections	Throat Swab or Nose and Throat swab	Virocult Viral Swab	Respiratory PCR Screen
	NPA	Sterile plastic universal	Respiratory PCR Screen
	BAL	Sterile plastic universal	As above Plus CMV PCR Pneumocystis carinii IFT (if requested - immunocompromised only)
	Induced Sputum	Sterile plastic universal	Pneumocystis IFT ONLY
	Acute and convalescent sera	Clotted Blood (5ml SST)	Chlamydia psittasi IgG Mycoplasma pneumoniae IgG,IgA,IgM Q fever IgG

N.B. Sputum samples are NOT the sample of choice for viral investigations but may be processed with prior arrangement with a consultant Virologist

Miscellaneous	Biopsy	Plain Sterile Plastic Universal + 1ml Sterile saline	PCR
	Post Mortem Tissue	Plain Sterile Plastic Universal + 4ml Sterile saline	PCR
	Post Mortem Swab	Virocult Viral Swab	PCR
	Other Serology	Clotted Blood (5ml SST)	Contact Laboratory
	Other Virology	Contact Laboratory	Contact Laboratory

Additional Molecular Tests

Sample	Transport container	Test Performed
Plasma	EDTA Bood (5ml EDTA)	HIV RNA Viral Load
Serum	EDTA Blood (5ml EDTA) or Clotted Blood(5ml SST)	Hepatitis B DNA Viral Load
Serum	EDTA Blood (5ml EDTA) or Clotted Blood(5ml SST)	Hepatitis C RNA Viral Load
Whole Blood	EDTA Blood (5ml EDTA)	Cytomegalovirus DNA Viral Load
Whole Blood	EDTA Blood (5ml EDTA)	EBV DNA + EBV DNA Viral Load
Serum	EDTA Blood (5ml EDTA) or Clotted Blood(5ml SST)	Hepatitis C Genotyping
Plasma	EDTA Blood (5ml EDTA)	HIV genotyping/resistance
Whole Blood	Virocult swab of Lesion or for ?systemic infection EDTA Blood (5ml EDTA)	HSV / VZV DNA
Contact Laboratory	Contact Laboratory	Other Molecular Assays

Guidance on Specimen Collection for Virological and Serological Investigations.

Specimen Type	Collection
Clotted Blood sample (Including HBV and HCV PCR)	5-10mls of Blood sample (adult) 2ml Blood sample (child)
Blood sample for PCR's (Not HBV and HCV)	5 mls blood sample in EDTA tube. (adult) 1ml Blood in EDTA tube (child)
Throat Swab	Vigorous swabbing of tonsillar areas and posterior nasopharynx using Virocult Virology Swab.
Urine	Minimum 5 ml cleanly voided urine in a sterile container. (USE Specific UPT Tube for Chlamydia) Do Not use boric acid (boricon) containers.
CSF	When requesting multiple tests on csf samples, please state clearly on request form the order of priority in which tests should be done.
Stool	Place approximately 5ml or 5g in a blue faeces pot.
Endocervical swab	Remove exocervical mucus with swab and discard. Insert Virology or Chlamydia swab into cervical canal and rotate for 10 seconds. Place swab in transport container.
Conjunctival swab	Swab lower conjunctiva with a Virocult Virology Swab.
NPA	To be performed only by staff trained in the procedure. Transfer aspirated material into a sterile universal container.
Endo tracheal secretions	See NPA
BAL	5 ml fluid in a sterile universal container
Pleural Fluid	5 ml fluid in a sterile universal container
Tissue Biopsy	Tissue biopsy in a sterile universal container with 2 ml sterile saline . Formalised tissue samples are NOT suitable for virological investigations.
Post Mortem Tissue	Up to 5g Tissue in a sterile universal container with 5 ml sterile saline . Formalised tissue samples are NOT suitable for virological investigations.

Guide to Schedule of testing

Due to the nature of virology investigations, the majority of assays are batch tested. Most Assays are performed daily or as required.

Frequency of testing does not equate to actual turnaround times.

For stated turnaround times refer to specific analytes in on line handbook search facility

For further information on any test please contact laboratory (ext. 14777) or use the online handbook analyte search facility.