



**BEAUMONT HOSPITAL**

**DEPARTMENT OF MICROBIOLOGY**

**GP USER GUIDE**

**October 2009**

**Prepared by: Aoife Houlihan**

## CONTENTS

Introduction .....	2
Laboratory Opening Hours .....	3
Receipt of Specimens .....	3
Location of Microbiology Dept. ....	4
Contacting the Microbiology Dept. ....	4
Sample Collection Guidelines .....	5
Specimen Rejection Criteria .....	7
Routine Specimen Requirements .....	8
? STI Specimen Requirements .....	9
Sample Turnaround Times .....	10
Samples Sent to NVRL .....	12
Specimen Containers Available from Beaumont Hospital .....	14

## INTRODUCTION

The Department of Microbiology provides a range of diagnostic and clinical services to Beaumont Hospital, other institutions and the surrounding community. In the community, the department is actively involved in the diagnosis and surveillance of infection. There is a sophisticated service for the investigation, diagnosis, treatment and follow-up of hospitalized patients with community acquired infection. Advice is also provided by the clinical microbiology team in relation to the clinical significance of isolates, antimicrobial therapy and management of sepsis.

This User Guide is designed to enable GPs to get the maximum benefit from the services provided by the Microbiology Department and to optimise turnaround time on results. It provides information on the microbiology and serology tests performed both in the laboratory and those referred to other centres in Ireland and the UK, such as the [National Virus Reference Laboratory \(NVRL\)](#).

## LABORATORY OPENING HOURS AND RECEIPT OF SPECIMENS

- The opening hours of the Microbiology Department are:

<b>Monday – Friday</b>	<b>9am – 5pm</b>
<b>Saturday</b>	<b>9am – 1pm</b>

- Please ensure that specimens arrive in Beaumont as early as possible in the working day.
- Specimens received in the laboratory late on Fridays risk being rejected due to extended storage.
- There is no facility for receipt of specimens outside of 9am to 5pm, Monday to Friday.  
Beaumont Hospital cannot accept responsibility for specimens brought to the laboratory outside these hours.
- The service provided by the laboratory on Saturday mornings is limited to follow up of specimens received during the week.
- There is no routine Sunday or bank holiday service.

## LOCATION OF MICROBIOLOGY DEPARTMENT

The Microbiology Department is located on the ground floor of Beaumont Hospital within the Pathology block.

Specimens should be brought to Pathology Reception for distribution to the Microbiology Laboratory.

## CONTACTING THE MICROBIOLOGY DEPARTMENT

### General Enquiries including Results

**Microbiology Office** 01 809 2646

### Medical Enquiries

#### Consultant Microbiologists

Dr. E. Smyth 01 809 2646

Dr. F. Fitzpatrick 01 809 3943

Prof. H. Humphreys 01 809 3396

**Registrars Office** 01 809 3320

01 809 3321

01 809 2667

### Scientific Enquiries

#### Chief Medical Scientist

Ms. Joan Moore 01 809 2645

**Microbiology Laboratory** 01 809 2647

## GENERAL SAMPLE COLLECTION GUIDELINES

- All samples should be labelled with
  - ◇ Patient name
  - ◇ Date of birth
  - ◇ Nature of specimen
  - ◇ Date of specimen collection
- Request forms should contain as much information as possible including
  - ◇ Nature and body site of specimen
  - ◇ Tests required
  - ◇ Relevant clinical details
  - ◇ Contact telephone number for GP
- **Writing** should be **clear and legible** on both the sample container and request form.
- Biohazard bags are to be used for transport of specimens to the laboratory. Please ensure that **specimens** are placed and **sealed in the zip-lock portion** of the bag and the **form** is placed in the **separate open pocket**.
- Samples should be transported to the laboratory as soon as possible after collection. If not included in a courier run, they should be packaged in accordance with ADR guidelines for transport of dangerous goods (UN3373, see [www.unece.org](http://www.unece.org) ).

- If a delay in transport is unavoidable, samples should be refrigerated at 4°C.

### **NOTE**

Please pack all NVRL samples (highlighted in green) in a separate envelope to Beaumont hospital specimens and label clearly 'NVRL'. Specimens incorrectly packaged will be rejected.

Please maintain a record of samples sent for direct transport to NVRL each day.

## SPECIMEN REJECTION CRITERIA

- Specimens which will be deemed unsuitable for examination include:
  - ◇ Unlabelled specimens
  - ◇ Mismatch of patient details on specimen container and request form
  - ◇ Leaking or improperly sealed containers
  - ◇ Overfilled containers (NB faeces/urine)
  - ◇ Unsterile containers
  - ◇ Specimens inappropriate for test required (see tables 1 and 2)
- In the case of a sample being rejected, the requesting GP will be informed by telephone and a written record of discarded samples will be kept in the laboratory. A written report will also follow if patient details are sufficient for logging on the Beaumont Hospital Information System (ie, full name and date of birth) and adequate contact details are available.

**Table 1: ROUTINE MICROBIOLOGY SPECIMEN REQUIREMENTS**

Specimen Type	Target Pathogens	Container/ Swab	Vol req'd (approx.)	Notes
<b>URINE - routine</b> <b>- pregnancy test</b> <b>- TB</b>	Urinary pathogens	MSU jar	25mls <sup>1</sup>	3 consecutive early morning urines
	n/a	MSU jar	25mls	
	Mycobacteria	MSU jar	25mls x3	
<b>FAECES -routine</b> <b>- FOB</b> <b>- O/P</b> <b>-rota/adeno virus</b>	Faecal pathogens	MSU jar	25mls	Clinical details essential, eg travel 3 consecutive days, meat free diet Collected on 3 consecutive days <sup>2</sup> Done on babies <2 years old
	n/a	MSU jar	25mls x 3	
	Ova and parasites	MSU jar	25mls x3	
	Rota/adeno virus	MSU jar	25mls	
<b>SPUTUM- routine</b> <b>- TB</b>	Respiratory pathogens	MSU jar	As available	Collected on 3 consecutive mornings
	Mycobacteria	MSU jar	As available	
<b>SKIN SCRAPINGS/ NAIL CLIPPINGS</b>	Dermatophytes and Yeasts	Dermapak/ MSU jar	As much as possible <sup>3</sup>	Swabs are not an appropriate sample for fungal culture
<b>SWABS – non uro-genital</b>  <b>- penile</b> <b>- HVS</b>  <b>- vulval</b>	Pathogens appropriate to site	Charcoal Transwab	n/a	Relevant clinical details essential
	Non STI pathogens	Charcoal Transwab	n/a	Relevant clinical details essential
	Candida, other non-STI pathogens	Charcoal Transwab	n/a	Relevant clinical details essential e.g. surgery, post partum
	Non STI pathogens	Charcoal Transwab	n/a	Relevant clinical details essential

1. 25mls = ½ MSU jar. It is important not to overfill the container.
2. O/P only performed when specifically requested **and** with relevant clinical details eg. foreign travel
3. Microscopy is prioritised over culture if insufficient sample is received.

**Table 2: STI SPECIMEN REQUIREMENTS**

Specimen Type	Target Pathogens	Container/Swab	Volume required (approx)	Notes
<b><u>MALE</u></b>				
<b>SWAB - urethral URINE - SWAB - urethral - rectal - pharyngeal</b>	<i>Chlamydia trachomatis</i>	Gen Probe Swab Gen Probe collection device	n/a 25 mls	Clinical details and stating specimen site essential.
	<i>N. gonorrhoeae</i>	Charcoal Transwab	n/a	Clinical details eg urethral discharge/ ?STI <b>essential</b> <sup>1</sup>
	<i>N. gonorrhoeae</i>	Charcoal Transwab	n/a	Clinical details essential <sup>1</sup>
	<i>N. gonorrhoeae</i>	Charcoal Transwab	n/a	Clinical details essential <sup>1</sup>
<b><u>FEMALE</u></b>				
<b>SWAB - endocervical</b>	<i>N. gonorrhoeae</i>	Charcoal Transwab	n/a	Clinical details essential <sup>1</sup>
<b>SWAB - endocervical URINE - SWAB - cervical - urethral - HVS</b>	<i>Chlamydia trachomatis</i>	Gen Probe Swab Gen Probe collection device	n/a	Clinical details and stating specimen site essential <sup>1</sup>
	<i>N. gonorrhoeae</i>	Charcoal Transwab	n/a	Clinical details essential <sup>1</sup>
	<i>N. gonorrhoeae</i>	Charcoal Transwab	n/a	Clinical details essential <sup>1</sup>
	Trichomonas, Bacterial vaginosis Candida and non-STI pathogens	Charcoal Transwab	n/a	Trichomonas and Bacterial vaginosis detected by microscopy only

1. In cases where *Neisseria gonorrhoeae* (GC) is suspected, clinical details of ?STI or URETHRAL DISCHARGE must be provided on the request form. If not, samples will not be cultured for GC. Transport delay must be minimised.

## SAMPLE TURNAROUND TIMES

### Urine

Test	Turnaround time
Culture and Sensitivity	24-48hrs
Pregnancy Test	Same day – 24hrs

### Faeces

Test	Turnaround time
Culture	48-72hrs
Examination for ova and parasites	48hrs
Rota/adeno-virus	Same day-24hrs
Faecal occult blood	Same day-24hrs

### Sputum

Test	Turnaround time
Culture and Sensitivity	48hrs

- Sputum samples should not be sent to the laboratory on Friday as they are not processed over the weekend and specimens greater than 48 hours old are unsuitable for processing.

## Swabs

Test	Turnaround time
<b>Culture and Sensitivity</b>	48hrs

- Charcoal transport swabs (black top) should be used for all sites where culture and sensitivity is required.
- Viral (pink top) and chlamydia (yellow top) swabs are unsuitable for routine culture and should only be used where appropriate.

## Fungi

Test	Turnaround time
<b>Direct Microscopy</b>	72hrs
<b>Culture</b>	3 weeks

## TB

Test	Turnaround time
<b>Auramine Stain</b>	Next working day
<b>Culture and Sensitivity</b>	8 weeks

## NOTES

- Turnaround times are calculated from receipt of specimens in the laboratory to final report authorisation. Extra time should be allowed for reports to be posted.
- Times given are the minimum turnaround time for sterile specimens. Specimens with positive cultures may take longer and delays will occur with all specimens over weekends.

## SAMPLES SENT TO NVRL

Test	Sample Required	Turnaround Time (Days)
<b>Brucella</b>	S/CB	5
<b>Chlamydia trachomatis</b>	US/CS/U/ES	5
<b>Cytomegalovirus (CMV)</b>		3-21
<b>Enteroviruses</b>	ST/TS	14
<b>Epstein Barr Virus (EBV)</b>	S/CB	3
<b>Hepatitis A Virus</b>	S/CB	3
<b>Hepatitis B Virus</b>	S/CB	3
<b>Hepatitis C virus</b>	S/CB	3-5
<b>Herpes Simplex Virus (HSV)</b>	S/CB	5
<b>Human Immunodeficiency Virus 1,2 (HIV)</b>	S/CB	3
<b>Leptospirosis</b>	S/CB	5
<b>Measles Virus</b>	S/CB	5
<b>Mumps Virus</b>	S/CB	5
<b>Mycoplasma pneumoniae</b>	S/CB	5
<b>Norovirus (SRSV)</b>	ST	3
<b>Parainfluenza Virus</b>	NPA/MW	2-14
<b>Parvovirus B19</b>	S/CB	5
<b>Q Fever (Coxiella burnetti)</b>	S/CB	5
<b>Respiratory Syncytial Virus</b>	NPA/SP	2-14
<b>Rhinovirus</b>	TS	14
<b>Rubella</b>	S/CB	3
<b>Syphilis</b>	S/CB	3
<b>Toxoplasma gondii</b>	S/CB	3
<b>Varicella Zoster Virus (VZV)</b>	S/CB	2

CS = Cervical Swab  
 ES = Eye Swab  
 MW = Mouth Washings  
 NPA = Nasopharyngeal Aspirate  
 S/CB = Serum/Clotted Blood

SP = Sputum  
 ST = Stool  
 TS = Throat Swab  
 U = Urine  
 US = Urethral Swab

## NOTES ON SAMPLES SENT TO NVRL

- Turnaround times given are reliant on samples going directly to NVRL from GP surgery.
- Specimens for forwarding to NVRL, MUST be packaged separately from routine Beaumont Hospital specimens in ENVELOPES or JIFFY BAGS, which are SEALED and clearly labelled NVRL.
- For tests where clotted blood is required, one 10ml vial is the specimen of choice.
- No records of results of NVRL samples are kept in the Microbiology Department. For results or enquiries, the NVRL can be contacted on 01 716 1323/ 1358/ 1341 (10-12pm and 2.30-4.30pm).
- Request forms can be printed on-line via the NVRL web site ([www.nvrl.ie](http://www.nvrl.ie)) – at ‘How do you send samples?’ prompt

## SPECIMEN CONTAINERS AVAILABLE FROM BEAUMONT HOSPITAL

### MSU JARS

- MSU jars are available from Beaumont Hospital Stores Department. Contact number: 01 809 3030.
- All orders must be accompanied by a requisition form. These are also available from the Stores Department

### SWABS

- Swabs and Beaumont Hospital GP request forms are available for collection from Pathology Reception every **Friday afternoon from 2 – 4pm only**, on a walk-in basis.

### VIRAL SWABS

- Viral swabs as well as Gen Probe swabs/collection devices are available from the NVRL. Fax 01-269 7611 stating clearly your address, phone number and quantity needed.