

GP Education

Topic: Pathology Services: a Practical Demonstration

Interviewer: Dr Leslie Borrill, Leicester City GP and a Lead Appraiser

Interviewee: Shaun Livsey, Biomedical Scientist

Time: 14 minutes 32 seconds

Overview:

There is a 5% error rate in samples received by the lab when information is missing or the wrong container is used. The samples take a disproportionate amount of time to resolve which impacts on patient care. Demonstrations are given on the appropriate sample containers to use.

Further guidance can be found in the Clinical Microbiology Laboratory Services Handbook <http://www.leicestershospitals.nhs.uk/aboutus/departments-services/pathology/clinical-microbiology/handbook/>

Urine samples

Do not dipstick into borated urine as the borate can artificially reduce several readings.

Boric acid is the ideal preservative and the laboratory prefers the green monovate system instead of the red top sample as it can be more efficiently processed at the lab. It also leaks less so it is less likely to be rejected. Please ensure that ID stickers are not wrinkled.

Minimum dataset requirements

Three data points of reference are required e.g. full name, date of birth, hospital number plus the date taken.

Printed labels are the ideal way of labelling a sample as it can be difficult to write clearly on a curved surface.

On the rare occasions where a small volume of urine is anticipated, a non-borated pot is recommended as a high boric acid concentration can kill some organisms.

Stool samples

A blue top bottle with a spoon should be used. 2-3mls of a stool sample is required as a minimum to carry out the full range of tests.

Routine stool culture focusses on Salmonella, Shigella, Campylobacter and Escherichia coli O157. Clostridium difficile testing is performed from the same sample.

Separate requests and samples need to be submitted for Virology.

Sputum samples

A sterile wide neck container is recommended. It is important to explain the difference to patients between saliva and sputum and to stress the importance of swift arrival at the lab. It is acceptable to send in the next courier collection.



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Pertussis

A perinasal swab is advised if whooping cough or pertussis is suspected as the end of the swab is very small to get to the back of the naso-pharynx.

Fungal samples

Hair, skin scrapings or nail clippings should be put in a wide necked sputum style pot or a white top sample bottle.

Gynaecological swabs

For bacterial infections of the vagina, use a swab containing transport media (blue or black top)

For Chlamydia, use a plain urine sample pot (not borated)

For Chlamydia and Gonorrhoeae, use a swab and viral transport media to facilitate the test

As indicated below use a fridge to store the sample until the next van collection

Storage

Avoid direct sunlight, radiators and hot air vents for storing samples prior to collection.

For all bacterial based samples, the best storage is in the fridge. Samples should not be frozen. The lab processes samples up until 8pm at night.

Virology

Stool samples are normally sent in a blue top container with a spoon integrated in the top. However, the spoon is not used so any small sterile container is suitable.

All viral serology requires clotted blood.

Key Messages

Label all samples with a minimum of three patient reference points.

Electronic requesting is preferred along with printed labels for ease of reading. Please stick labels flat to sample container.

Ensure tops are securely fitted to stop leakage.

