PUBLIC HEALTH LABORATORY
DUBLIN,
HSE, DML.

USERS MANUAL

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FOREWORD

We hope that the production of this manual will help all users of the Public Health Laboratory to get the best value from the PHL service. In particular, we hope that it will aid in selecting and obtaining the most appropriate specimen, submitting appropriate information for test selection, transporting the sample to the laboratory without delay and aid interpretation of results. The value of a particular bacteriology test is still greatly dependant on this process.

If you have any comments, corrections or suggestions on this manual we would like to hear from you.

Document control:
All changes made to a new issue of this document are highlighted.

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March 2017
GENERAL INFORMATION

This user manual provides information on the activities and structure of the Public Health Laboratory Dublin.

The Public Health Laboratory is a Health Service Executive laboratory, located within the grounds of Cherry Orchard Hospital, Ballyfermot, Dublin 10. The laboratory provides a microbiology scope for:

1. A National VTEC (verocytotoxin *E.coli*) Reference service. Clinical and environmental samples are analyzed for VTEC utilizing molecular and culture techniques. The VTEC service is accredited to ISO 15189 for clinical enteric specimens and ISO 17025 for food, water and environmental samples.

2. A detailed gastro-enteric clinical microbiology diagnostic service accredited to ISO 15189 to support and advise on the investigation of gastro-enteric outbreaks both nationally and regionally.

3. A clinical diagnostic microbiology service for long-term care facilities and local general practices.

4. An ISO 17025 accredited Regional Public Health food and water microbiology service. This is accessed by the Environmental Health Service (EHS), Public Health Doctors and Acute Hospital Facilities.

Clinical samples, isolates and food and water samples are tested for microbiological analysis only.

OPENING HOURS:

Routine service is provided from 9.00 a.m. to 5.00 p.m. Monday-Friday, a limited service on Saturday morning from 9.30 a.m. to 12.30 pm and Sunday from 10.00 to 12.00 mid-day. Outside of these hours, please contact the laboratory to arrange the receipt of specimens or specimens may be delivered to the gate lodge of COH and refrigerated until collected by laboratory staff. Clerical staff are available for results or enquiries etc. from 9.00 a.m. to 5 p.m. Monday to Friday at 07669 55175.

OUT OF HOUR’S SERVICE:

A consultant microbiologist approved emergency ‘out of hours’ service is available between 5 p.m. and 9 a.m. Monday to Friday and between 12.30 p.m. on Saturday to 9.00 a.m. on Monday. This service is accessed by contacting the Laboratory Director or the designated locum. Contact details are available via the Cherry Orchard Hospital switchboard (0766955000).
Note that the Consultant Microbiologist must be telephoned for urgent specimens to be processed out of hours, users should not telephone the laboratory as telephones are not staffed out of routine hours.

**CLINICAL ADVICE:**

Advice regarding diagnosis and treatment of infection is available at all times. Contact numbers are given overleaf. For out of hours advice including infection control advice, please contact the on-call Consultant Microbiologist via switchboard (0766955000) or on-call Medical Scientist.

Advice regarding the designation of environmental results on the final report is available at all times. Contact numbers are given overleaf.

**USER SATISFACTION:**

The Public Health Laboratory operates an on-going process of service evaluation and improvement to meet the needs and requirements of users. Laboratory management regularly assesses contributions and complaints received in the laboratory from users of the Microbiology service.
## PHL STAFF CONTACT NUMBERS (07699 55175)

<table>
<thead>
<tr>
<th>Name</th>
<th>Ext.</th>
<th>E mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>General secretarial office</td>
<td></td>
<td><a href="mailto:phl.dublin@hse.ie">phl.dublin@hse.ie</a></td>
</tr>
<tr>
<td>General enquiries/results</td>
<td>0766955175</td>
<td></td>
</tr>
<tr>
<td>Consultant Microbiologists</td>
<td></td>
<td></td>
</tr>
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<td>Dr. Eleanor McNamara</td>
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</tr>
<tr>
<td>VTEC Service</td>
<td></td>
<td></td>
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<tr>
<td>Anne Carroll</td>
<td>0766955214</td>
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<tr>
<td></td>
<td>0766955263</td>
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<td></td>
<td>0766955247</td>
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</tr>
<tr>
<td>Clinical Laboratory</td>
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<tr>
<td>Senior Medical Scientist</td>
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<td></td>
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<tr>
<td>Donal Lanigan</td>
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<td><a href="mailto:donal.lanigan@hse.ie">donal.lanigan@hse.ie</a></td>
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<tr>
<td>Food Laboratory</td>
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<tr>
<td>Senior Medical Scientist</td>
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<td></td>
</tr>
<tr>
<td>Aidan Gibson</td>
<td>0766955216</td>
<td><a href="mailto:aidan.gibson@hse.ie">aidan.gibson@hse.ie</a></td>
</tr>
<tr>
<td></td>
<td>0766955249</td>
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<tr>
<td>Water Laboratory</td>
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<tr>
<td>Senior Medical Scientist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paul Larkin</td>
<td>0766955217</td>
<td><a href="mailto:paul.larkin@hse.ie">paul.larkin@hse.ie</a></td>
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<tr>
<td></td>
<td>0766955250</td>
<td></td>
</tr>
<tr>
<td>Quality Manager</td>
<td></td>
<td></td>
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<tr>
<td>Lucy Devlin</td>
<td>0766955248</td>
<td><a href="mailto:lucy.devlin@hse.ie">lucy.devlin@hse.ie</a></td>
</tr>
<tr>
<td>Infection Control Nurse Specialist</td>
<td>0766955215</td>
<td>Muthu Saba</td>
</tr>
</tbody>
</table>
SAMPLE SUBMISSION

GENERAL GUIDELINES

All samples submitted to PHL should be in the appropriate sterile container along with the relevant completed PHL request form. Samples should be transported to the laboratory as soon as possible under the appropriate transport conditions.

VTEC AND CLINICAL SAMPLES:

Faecal specimens or bacterial isolates are tested for verocytotoxin producing *E. coli*. See details for gastrointestinal tract specimens below.

Collect specimens in sterile containers before commencement of antimicrobial therapy. This is usually possible for most mild infections. For more serious infections, antimicrobial therapy should not be withheld pending collection of a specific specimen. However, blood cultures can be obtained in nearly all cases prior to antimicrobial treatment of serious infection.

If in any doubt as to the appropriate container, please contact the laboratory for advice.

Please send an adequate amount of specimen. As a general rule – ‘the more specimen the better’. If pus is present, send pus rather than a swab and remember to send enough specimen if a whole series of tests are required.

Please ensure that relevant clinical details are included on the request form. All of the above may influence the type of test that the laboratory performs.

COMPLETION OF PHL CLINICAL REQUEST FORMS:

Adequate identification of patient samples is essential for patient safety.

The following details must be recorded on the request form:

- **Full Patient Name**
- **DOB**
- **Patients Address**
- **External laboratory number/MRN** (where available)
- **Gender**
• Date of Collection
• Ward/Source
• Requesting Clinician
• Specimen Type
• Tests requested

Those highlighted in **bold** are essential patient identifiers.

Please ensure that relevant clinical details are included on the request form. For example, include details if the specimen is sent during an outbreak (outbreak code) or if there is a history of foreign travel or a specific diagnosis is being considered. All of the above may influence the type of test that the laboratory performs.

Bacterial isolates for identification, serotyping or toxin testing must be accompanied by a current VTEC request form. This form is available from:

[http://www.hse.ie/eng/services/Find_a_Service/Public_Health/publichealthlabs/Public_Health_Laboratory_Dublin/](http://www.hse.ie/eng/services/Find_a_Service/Public_Health/publichealthlabs/Public_Health_Laboratory_Dublin/)

**SPECIMEN/SAMPLE IDENTIFICATION**

The following details should be recorded on all specimens:

- Full Patient Name
- DOB
- MRN (where available)
- Date of collection

Those highlighted in **bold** are essential patient identifiers.

Specimens cannot be processed unless there is a minimum of two patient identifiers on the specimen which match those on the request form, one of which must be the full patient name. **If the sample does not have the two patient identifiers or is unsuitable (i.e. leaking) the client will be informed by telephone and a repeat sample requested. The sample is still logged in and it is recorded as an unsuitable sample on our Laboratory Information Management System (LIMS) and a telephone comment is also recorded.**

It is laboratory policy **NOT** to process unlabelled or mislabeled specimens.
TRANSPORT OF CLINICAL SPECIMENS/SAMPLES TO THE LABORATORY.

- Specimens should be transported and processed as soon as possible; individual test requirements may invalidate the test request if the samples is too old (48-72h).
- All sample containers must be tightly closed and placed in a transport hazard bag. All VTEC samples must be packaged appropriately. Clinical specimens/bacterial isolates for identification, serotyping or toxin testing must be transported to the laboratory in suitable packaging (Ref: UN 3373 Category B Infectious Substances and UN 2814 Infectious Substances by road).
- It is the responsibility of the person dispatching the sample to the laboratory to ensure that it is packaged correctly and does not pose a risk to anyone coming in contact with it during transport or on receipt in the laboratory (Ref: S.I. No.617 of 2010 Carriage of Dangerous Goods by Road Regulations 2010).
- Faeces samples are held at room temperature if they are to be processed on the day of arrival in the laboratory. Other sample types (e.g. urines) are refrigerated at 2 - 8ºC.
- If processing is delayed sample should be refrigerated at 2 - 8ºC for a maximum of 72 hours.
- Urgent samples will be processed upon receipt or discussed with Consultant Microbiologist if received out of hours. Clients sending urgent samples should notify the laboratory in advance as outlined in the PHL Users Manual.
- 1-2g is sufficient for culture of faeces. As multiple samples are rarely indicated for detection of faecal pathogens, if more than one sample is taken on the same day they may be pooled.
- Isolates received for VTEC analysis before 11a.m. will be processed directly from the slope/plate on the day of receipt.
- For ova and parasite analysis, ideally three stool samples should be collected over no more than a 10-day period. It is usually recommended that samples are collected every other day. Unless the patient has severe diarrhoea or dysentery, no more than one sample should be examined within a single 24 hour period, as shedding of cysts and ova tends to be intermittent. If E. histolytica or G. duodenalis are suspected and the first 3 samples are negative, ideally 3 additional samples should be submitted at weekly intervals. There are no prescribed limits for the size of sample required, but some laboratory procedures will require larger quantities than others.
- For Sellotape slides/perianal swabs suspecting E. vermicularis ova, the sample should be taken between 10pm and midnight, or early in the morning, before defecation or bathing. To prevent deterioration, refrigeration or storage of sample
at room temperature for up to 48hrs is advised. It is recommended that samples should be taken for at least 4 to 6 consecutive days. If the results of all these are negative the patient can be considered free from infection. In practice, more than one sample is rarely received.

- Samples requesting detection of *S. haematobium*, it is preferable to obtain total urine collected over the time period between 10am and 2pm. A minimum of 10ml is required. In patients with haematuria, eggs may be found trapped in the blood and mucus in the terminal portion of the urine sample. If the urine cannot be examined within an hour of collection, it is advisable to add 1mL of undiluted formalin to preserve any eggs that may be present. For duodenal/jejunal aspirates, a minimum volume of 1mL is required.

- Fresh faeces samples are essential for the examination of trophozoites ideally within 30 minutes from the time of collection.

**SWABS/CONTAINERS USED IN THE PHL DUBLIN**

1. **Universal container** – two types with different apertures are used for collection of bodily fluids – stools, pus, urine, etc.

2. **Amies Transport Swabs** for routine collection of swab specimens of skin, wounds etc.

3. **Blood culture bottles**:
   - Oxoid SIGNAL blood culture BC100M

4. **Viral transport medium and viral swabs**:
   Please consult the Laboratory Diagnosis of Viral infections handbook for further details, or contact the Microbiology Medical Staff.
FOOD AND WATER SAMPLE SUBMISSION:

FOOD SAMPLES:
Foods should be sampled and transported to the laboratory as per “FSAI/HSE Guidance on Sampling of Food for Microbiological Testing Issue 1 Revision 3, 2014.

Official Food Sample
- Under the terms of the Official Control of foodstuffs Directive 93/99/EEC an official food sample is a sample that is examined in an official Food Control Laboratory.

Formal Food Sample
- A formal sample is a sample taken for which formal action and/or legal proceedings may ensue or for which formal action may be considered.

Specimen Request Form for Food samples.
A specimen request form (National Sample Submission Form (NSSF)) should accompany each sample of food to be tested. The receiving PHL staff member must record the following details on the requisition form:

1. Date and time of receipt of sample.
2. Temperature of sample on receipt if appropriate
3. Receivers name
4. Storage condition on receipt
5. Tick box once sample and form information has been crosschecked.

By the EHO:

1. Name of the EHO delivering sample
2. Name of EHO collecting sample
3. Food type and code
4. Packaging conditions etc
5. Reason for sampling
6. Supplementary information if food poisoning outbreak
7. Premises name and sample description.
8. Any other comments about the sample

Sample Size
The standard minimum routine food sample size for the PHL is 100g (25g x 4).

WATER SAMPLES:
Water samples must be submitted in sterile containers. The sample container must contain sodium thiosulphate if the water sample has been treated with a biocide (e.g. chlorine).

If in any doubt as to the appropriate container or transport conditions, please contact the laboratory for advice.

**Specimen Request Form for Water samples**

A specimen request form should accompany each sample of water sample to be tested. The receiving PHL staff member will record the temperature of the container that was used to transport the sample.

See Table 1 for the minimum volume of sample required and the type of container required.

<table>
<thead>
<tr>
<th>Sample type</th>
<th>Min. Vol. required</th>
<th>Sodium Thiosulphate</th>
<th>Sterile Container</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mains/ Drinking Water</td>
<td>500ml</td>
<td>Required</td>
<td>YES</td>
</tr>
<tr>
<td>Endoscopy water</td>
<td>500ml</td>
<td>Required (If biocide)</td>
<td>YES</td>
</tr>
<tr>
<td>Heater cooler water</td>
<td>300ml</td>
<td>Required (If biocide)</td>
<td>YES</td>
</tr>
<tr>
<td>Swimming Pools</td>
<td>500ml</td>
<td>Required</td>
<td>YES</td>
</tr>
<tr>
<td>Hydrotherapy pools</td>
<td>500ml</td>
<td>Required</td>
<td>YES</td>
</tr>
<tr>
<td>Well Water (microbiologically treated)</td>
<td>500ml</td>
<td>Required (If biocide)</td>
<td>YES</td>
</tr>
<tr>
<td>Well water untreated</td>
<td>500ml</td>
<td>Not Required</td>
<td>YES</td>
</tr>
<tr>
<td>Group Scheme (treated)</td>
<td>500ml</td>
<td>Required (If biocide)</td>
<td>YES</td>
</tr>
<tr>
<td>Group Scheme (untreated)</td>
<td>500ml</td>
<td>Not Required</td>
<td>YES</td>
</tr>
<tr>
<td>Seawater</td>
<td>500ml/1000ml/2000ml</td>
<td>Not Required</td>
<td>YES</td>
</tr>
<tr>
<td>Surface water</td>
<td>500ml</td>
<td>Not Required</td>
<td>YES</td>
</tr>
<tr>
<td>Water for pathogens</td>
<td>At least 1 litre</td>
<td>If biocide present</td>
<td>YES</td>
</tr>
<tr>
<td>Bottled water</td>
<td>At least 1 litre</td>
<td>If biocide present</td>
<td>YES</td>
</tr>
<tr>
<td>Pre bottled water</td>
<td>At least 1 litre</td>
<td>If biocide present</td>
<td>YES</td>
</tr>
</tbody>
</table>
Please ensure that relevant details are included on the request form. All of the above may influence the type of tests that the laboratory performs.

The current food and water sample request forms are available to download from the website:

http://www.hse.ie/eng/services/Find_a_Service/Public_Health/publichealthlabs/Public_Health_Laboratory_Dublin/

**SAMPLE REJECTION:**

Referred samples that don’t meet the required acceptance criteria will be registered and discussed with a Senior Scientist or Consultant staff. If the decision is to reject the sample, it will be discarded and the reason for rejection noted and informed to the referring doctor/laboratory. It is laboratory policy **NOT** to process unlabelled or mislabelled samples. Where deviating samples are chosen to be processed, this will be recorded as such and, if applicable, an interpretation will be applied cautiously.

**SAMPLE RETENTION AND FURTHER TESTING REQUESTS:**

**Clinical Specimens:**

Following testing, routine clinical samples are stored at 2 - 8º C for a week or until the final report has been authorised.

Samples processed in the CL3 laboratory are stored at 2 - 8º C for a minimum of a week.

Requests for further testing on samples may be possible on a case-by-case basis, up to 72 hours after receipt. Please contact the Laboratory as soon as possible if the need for further testing is identified. **If a client/user requests additional testing verbally, it must be followed up by a written confirmation.**

**Food and Water Samples:**

**Where practicable,** food samples are frozen at -30ºC on the day of testing and retained in the laboratory for up to three weeks.
Water samples are stored in the fridge for up to a week. A sample will be held for longer than a week should further testing be required and/or until the final confirmed results are obtained.

VTEC Isolates:

VTEC isolates that are toxin positive are logged and stored indefinitely on freezer beads at -70°C.

COMPLAINTS PROCEDURE:

A complaints procedure is in place in the Public Health Laboratory. Initial complaints may be received by phone. All complaints will be fully investigated in accordance with our quality management system documented protocols (See File 8).

TURNAROUND TIME:

Turnaround times vary depending on the sample type and the tests requested. When sending a culture to PHL for VTEC testing, please pick from a non-selective medium or check the purity of the isolate before sending. Submitting a pure culture ensures that results are available within 24 hours.

PHL PROTOCOL FOR PHONING RESULTS:

Clinical results
All preliminary positive results, of clinical significance are phoned to the relevant client.

All results
If a significant pathogen is detected, a preliminary result will be phoned to the client and then a final hard copy result dispatched. Such phone calls are documented on LIMS and the final report/cert of analysis.

PHL POLICY ON FAXING AND E-MAILING REPORTS:

The public health laboratory complies with the Health Service Executive’s policies on electronic transmission of results.
A. SUMMARY OF VTEC AND CLINICAL MICROBIOLOGY SERVICE.

The PHL provides a National VTEC Reference service for clinical and environmental samples. This service is accessed by Directors of regional and primary clinical laboratories, the Environmental Health Service and Public Health Doctors who submit samples or presumptive isolates for confirmatory VTEC studies and detailed molecular strain characterization.

Isolates for Verocytotoxin producing E. coli (VTEC)

The range of services includes:

- Identification to genus and species level
- Phenotypic and molecular typing.
- A serodiagnostic service for E. coli O157, O26, O104, O145, O111 and O103

Clinical diagnostic specimens are submitted by Clinicians for general microbiology studies from long-term care facility patients or from community patients attending local general practices.

The following are some recommended samples to be sent from patients with particular clinical syndromes -

1. GASTROINTESTINAL TRACT INFECTION

Gastroenteritis

Please note that this laboratory employs a cost-effective approach to the diagnosis of infectious diarrhoea. Not all specimens are examined for every pathogen. It is therefore important that clinical details or suspected diagnoses are included on the request form. Information that is of use when processing specimens includes: travel history, relationship to a particular food, prolonged diarrhoea, antibiotic use, suspected outbreak. The laboratory examines all stool samples routinely for:

- Salmonella sp.
- Shigella sp.
- VTEC (Verotoxigenic E. coli)
- Campylobacter sp.
- Clostridium difficile toxin detection and culture is performed on all specimens from patients over 2 years of age.
- Other pathogens e.g. Cryptosporidium, Yersinia, Vibrio, Aeromonas, ova and parasites etc. are only examined if the clinical details suggest that possibility or if specifically requested.
Ova and Parasite testing may be requested if the patient has had chronic unexplained diarrhoea, if the patient is immunocompromised or if there is a history of foreign travel.

- **Rotavirus/Adenovirus** detection is performed on patients under 5 years of age.

- Accreditation to ISO 15189 is pending for the detection of norovirus and other enteric viruses.

If typhoid fever is suspected, please send a blood culture in addition to a faecal sample.

- **When to send a stool specimen**: Send a stool specimen to the laboratory when there are ≥3 liquid or very loose stools per day. There may be other symptoms suggestive of infectious diarrhoea e.g. abdominal pain or discomfort, nausea, faecal urgency, tenesmus, fever, blood or mucus in stools. Asymptomatic patients may be requested to submit samples in outbreak investigations. Within the hospital specimens must be sent to the laboratory immediately. In General Practice, please refrigerate if there is to be a delay in transporting the specimen.

- **How many samples to send**: One stool specimen is normally all that is required for culture. As microscopy for parasites is less sensitive, please send 3 specimens (but no more than 3) on different days as some parasites are excreted intermittently. If a worm is excreted, please send the worm and faeces sample.

- **How much to send**: Please fill the specimen container to between ¼ and ½ full. Please do not fill to the brim.

2. SUSPECTED BACTERAEMIA, SYSTEMIC INFLAMMATORY RESPONSE SYNDROME (SIRS), SEPSIS, SEPTIC SHOCK

**Blood cultures** - For optimum sensitivity, two sets of blood cultures should be collected from separate sites within a 24 h period. These should be taken at least 20 min apart. For patients with suspected endocarditis, three sets should be collected.

**Method**: Observe standard precautions, wash hands, carefully disinfect the skin with alcohol, allow to dry, wear sterile gloves, insert vacutainer into vein, collect 10 ml of blood into Oxoid SIGNAL blood culture BC100M and 10 ml into Haemoline Perf. diphas blood culture bottles 52510. Yeasts and fungi may be detected in the normal blood culture system.
3. RESPIRATORY TRACT INFECTION

Tonsillopharyngitis:
Send a throat swab. Please contact the laboratory if diphtheria or pertussis is suspected.

Sinusitis:
Using a syringe aspiration technique, a specially trained physician or an ENT surgeon can obtain material from maxillary, frontal, or other sinuses. Place the contents of the syringe into a sterile universal container.

Otitis media:
Usually no specimens are forwarded to the laboratory.

Bronchitis:
A good quality purulent or mucopurulent sputum specimen should be obtained, preferably before antimicrobial therapy.

Pneumonia:
It is not necessary to perform a full range of microbiological investigations on all patients with community-acquired pneumonia. The extent of investigation should be determined by the severity and clinical course. Specimens that should/may be sent include:

- Blood cultures should be obtained from all patients.
- Sputum: A good quality purulent or mucopurulent sputum specimen should be obtained, preferably before antimicrobial therapy although antimicrobial therapy should not be delayed unnecessarily while awaiting a sputum specimen. The specimen should be transported to the laboratory within 2 h. Salivary or mucosalivary specimens are unsuitable and as such are not processed.

4. URINE SPECIMENS

When should you send a sample of urine?

It is probably reasonable to treat a young sexually active female with symptoms of simple cystitis empirically but a urine specimen should be sent for microbiological examination from all other cases. In severe or complicated UTI, a follow-up specimen should be taken 5 days post completion of antibiotic therapy. Persistence of bacteriuria implies a structural abnormality.
A specimen should be sent from patients with symptoms as asymptomatic bacteriuria is generally not a cause for concern except in pregnant women and patients undergoing surgery on the g-u tract. The role of asymptomatic bacteriuria in children is controversial.

The same applies to patients with in-dwelling urinary catheters. Bacteriuria occurs in the vast majority of patients who are catheterised for more than 5 days, a urine specimen should only be sent if there are symptoms or signs suggestive of a urinary or a systemic infection.

**What type of specimen should you send?**

Send a **mid-stream specimen of urine** (MSU) where possible. Patients should be instructed to pass a little urine into the toilet first, then pass enough urine into the specimen container to half fill it and finish urinating into the toilet. Never obtain urine from a bedpan or commode. Obtain about 10 ml of urine in a sterile universal container tighten the lid and transport to the laboratory without delay. Specimens should be processed within 4 h. In General Practice if transport to the laboratory has to be delayed, the specimen can be stored at 4°C for up to 48 h.

A **clean catch urine** may also be obtained if the patient cannot co-operate.

A **catheter specimen of urine** (CSU) may also be sent to the laboratory. Urine should be obtained from an already catheterised patient by a syringe and needle from the catheter before it enters the collection bag. Clean the access point with a swab saturated with 70% isopropyl alcohol and allow time to dry. Using a sterile syringe and needle (if necessary), aspirate the required amount of urine from the access point. Re-clean access point with a swab saturated with 70% isopropyl alcohol.

### 5. RECTAL SWABS

Rectal swabs are used to detect rectal carriage of resistant organism’s e.g. vancomycin resistant Enterococci or carbapenem-resistant Enterobacteriaceae (CRE). The tip of a sterile swab is passed approximately 2.5 cm beyond the anal sphincter. Rotate the swab gently and withdraw it into the appropriate transport medium.
6. SKIN AND SUPERFICIAL WOUND SWABS

Note that routine sampling of skin lesions that do not appear clinically infected should generally not be performed. If there is a clinically infected lesion, please send a sample of pus in a universal container wherever possible. Pus is always preferable to a swab. If there is insufficient specimen, then use Amies Transport swab, sample the infected area and send to the laboratory.

7. DEEP-SEATED WOUNDS/ABSCESSES/ POST-OPERATIVE WOUND INFECTION

Please send a sample of pus in a universal container wherever possible. Pus is always preferable to a swab. If there is insufficient specimen, then use an Amies Transport Swab, sample the infected area and send to the laboratory. Clean the surface of the wound with sterile saline or water before taking the swab.
B. A SUMMARY OF THE FOOD TESTING SERVICE:

The Public Health Laboratory is designated an “Official Laboratory” approved for Microbiological testing under Statutory Instrument (SI) 117/2010: European Communities (Official Control of Foodstuffs) Regulations 2010.

ISO 17025 ACCREDITATION:
The Public Health Laboratory is accredited to ISO 17025 by the Irish National Accreditation Board. ISO 17025 section 4.5 requires laboratories to review the competency of referral laboratories. A competent referral laboratory is one that complies with this International Standard.

For information:

The current scope of accreditation for the Laboratory is freely available as a “pdf” download from the INAB web site at: http://www.inab.ie/directoryofaccreditedbodies/laboratoryaccreditationtesting/101T.pdf

Food samples are tested as per the FSAI/HSE service contract in addition to samples analysed from hospitals.
A schedule of testing is agreed locally on an annual basis with the environmental health service (EHS) and hospital catering managers. National surveys are agreed annually with the Food Safety Authority of Ireland (FSAI).

FOOD TESTING AVAILABLE:

The following tests are available:

- Aerobic Colony Count
- Enumeration of *Escherichia coli*
- Enumeration of *Staphylococcus aureus*
- Enumeration of *Bacillus* species including presumptive *Bacillus cereus*
- Enumeration of *Clostridium perfringens*
- Detection of *Salmonella* species including *S.enteritidis* and *S.typhimurium*
- Detection and Enumeration of *L.monocytogenes* and Other *Listeria* species
- Detection of *Campylobacter* species including *C.jejuni* and *C.coli*
- Enumeration of *Enterobacteriaceae*
- Detection of *Escherichia coli* O157 using Immuno Magnetic Separation (IMS)
- Detection of *Escherichia coli* O26 using Immuno Magnetic Separation (IMS)
- Detection of *Salmonella* species by VIDAS including *S.enteritidis* and *S.typhimurium*
- Verocytotoxin *E. coli* (VTEC) detection by PCR

C. A SUMMARY OF THE WATER TESTING SERVICE.

A local schedule of water testing is reviewed and agreed annually with the HSE, EHS and hospital clients.

WATER TESTING AVAILABLE:

- Enumeration of Coliform Bacteria and *E. coli* by Membrane Filtration
- Enumeration and confirmation of Enterococci
- Enumeration and confirmation of *Clostridium perfringens*
- Enumeration of Total Plate Counts
- Enumeration and confirmation of *Ps. aeruginosa*
- Detection and enumeration of Coliform Bacteria and *E. coli* by IDEXX Quantitray™
- Detection of *E.coli* O157 using IMS
- Detection of *E. coli* O26 using IMS
- Detection of *Salmonella spp.* by VIDAS and/or by culture
- Detection and enumeration of *Legionella* species by membrane filtration
- Total Viable Count for Environmental/Endoscopy water
- Detection of mycobacterium species by membrane filtration
- Enumeration of *S. aureus* by Membrane Filtration (Non-Accredited)
- Verocytotoxin *E. coli* (VTEC) detection by PCR