Specialist Microbiology Network
Public Health Laboratory, East of England

Public health microbiology services user handbook
About Public Health England

Public Health England exists to protect and improve the nation’s health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

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1 Role of the PHE Specialist Microbiology Network

Public Health England (PHE) has a network of eight specialist microbiology laboratories across England. Each lead laboratory provides:

- microbiology support for the investigation, management and control of infection and outbreaks of communicable disease both during and out of normal working hours
- expert medical and scientific microbiological advice, including access to PHE experts locally and nationally, as necessary
- a wide range of diagnostic, specialist and reference tests
- national standard methods and PHE testing algorithms
- clear guidance for users
- surge capacity to deal with large (up to 500 specimens per day), unanticipated outbreaks at short notice; PHE can also provide additional capacity for larger testing numbers and access to specific typing if required to define the epidemiology of outbreaks
- support for both regional and national capacity to respond to specific events of potential public health importance (eg London 2012 Olympic and Paralympic Games)
- testing for look-back exercises for health protection teams (HPTs), acute NHS trusts, CCGs, and local authorities
- Reporting of laboratory results within specified turnaround times for diagnostic specialist and reference tests; results will be communicated by electronic means wherever possible and may be supported by paper reports as required or appropriate - these services will be provided to all customers (HPTs, NHS trusts and CCGs)
- standard interpretive comments as a part of test reports
- senior clinical and scientific staff will add specific interpretation and further advice relevant to individual patient needs or for public health significance
- mechanisms for the proper handling, storage and security of all samples and documentation at all times; this will be carried out in accordance with PHE guidelines, national guidelines and regulatory/legal requirement
- efficient and timely communications with public health organisations, both within the PHE (including HPTs) and externally - eg local authorities and primary care groups/clusters involved in communicable disease control
- microbiology support for the investigation, management and control of incidents of infection and outbreaks of communicable disease both during and out of normal working hours
- expert medical and scientific microbiological advice, including access to PHE experts locally and nationally as necessary
- assistance during field investigations by processing clinical samples
• receipt, processing and reporting of laboratory results and epidemiological data in a timely and efficient manner
• assistance in maintaining an efficient communication network with all public health and NHS organisations involved in communicable disease control in the East of England

All PHE diagnostic laboratories have Clinical Pathology Accreditation. The Food, Water and Environment (FW&E) laboratories are all recognised as EU Official Testing Laboratories and are accredited by UKAS.

2 Public Health Outcomes Framework

In addition to its clinical diagnostic microbiology role, the PHE East of England lead laboratory in Cambridge provides a range of public health microbiology services. These include:
• a full range of tests to investigate any event or outbreak of possible public health significance in the community
• advice on the best diagnostic strategies to be adopted
• advice on interpretation of test results and additional investigations that may be helpful
• support to incident/outbreak investigation teams
• prompt communication of results in agreement with published turnaround times
• follow up/clearance testing of patients or contacts of patients in whom organisms of public health importance are detected
• support for trusts/HPTs in the specialist investigation of healthcare associated infection

These public health microbiology services are available to:
• staff in health protection teams
• local authority staff and directors of public health
• clinical commissioning groups
• acute trusts

The East of England laboratories are linked to a network of specialised PHE laboratories across England (including laboratories testing food water and environmental samples) and to major reference units at PHE Colindale and PHE Porton (Microbiology Research services) as part of the National Infection Service. This user manual describes the provision of and access to public health microbiology services and gives contact details for the laboratory and its key personnel.
Separate laboratory user manuals are available that document the clinical diagnostic and research services provided by the East of England laboratories.

Please note that support and access to food, water and environmental microbiology services can be obtained from:

PHE Food, Water and Environmental Microbiology Services

Food, Water & Environmental Microbiology Laboratory London,
61 Colindale Avenue
London
NW9 5EQ
Tel: 0208 327 6548/6550/6549 FAX: 0208 327 6542

3 Key contacts

Who to contact during normal working hours: In the event of a suspected outbreak or incident please use the following contact number(s) so that appropriate arrangements for investigation can be made.

The Cambridge Laboratory Reception is open:
  Monday to Friday: 9am to 5pm
  Saturday, Sunday and public holidays: 9am to 4pm
  The direct dial telephone number is 01223 257034 or 257037

3.1 Medical advice

During working hours, any of the medical staff will be happy to help you with any enquiries that you may have. Our office administrators will put you through to the most appropriate person to answer your call.

3.2 General enquiries

During working hours, any of the medical staff will be happy to help you with any enquiries that you may have. Our Office Administrators will put you through to the most appropriate person to answer your call.

3.3 Key laboratory personnel and contact details

Any other issues, contact the Lead Public Health Microbiologist on 01223 216814 or via the hospital switchboard on 01223 245151, or the Regional Head of Operations on 01223 257021 or 07912 997706.
3.4 Out-of-hours service

The laboratory provides an emergency out-of-hours service for urgent medical advice and to receive and process urgent specimens.

Out-of-hours: 7pm to 7am at weekends and on bank holidays.

On-call microbiologist or virologist: contact via the hospital switchboard on 01223 245151

In case of difficulty, contact the Lead Public Health Microbiologist on 01223 216814 or via the hospital switchboard on 01223 245151, or the Regional Head of Operations on 01223 257021 or 07912 997706.

Contact on-call laboratory staff for specific specimen delivery arrangements out of hours.
4 Laboratory location, working hours and access details

The laboratory is located at Addenbrooke’s Hospital, Hills Road, Cambridge. Details of parking arrangements and opening hours are below. The link below takes you to various site maps.

www.cuh.org.uk/addenbrookes/finding_us/finding_us_index.html

The postal address is:
Clinical Microbiology & Public Health Laboratory
Box 236, Addenbrookes Hospital, Hills Road, Cambridge, CB2 0QW
4.1 Laboratory working hours

Monday to Friday: 7am to 7pm
Weekends and bank holidays: 8am to 5pm

Please contact the laboratory in advance of submission, with details of the incident/outbreak and investigations required. Please notify the laboratory of the log/outbreak identifier if one has been assigned.

Outside of these core operational hours, specimens may be passed through the secure specimen hatch outside the laboratory doors on level 6.

All non-urgent specimens should arrive in the laboratory within the hours specified.

5 NHS laboratories and access to public health testing in the East of England

NHS laboratories that have provided local public health outbreak support as part of their NHS functions should continue to do so.

All NHS laboratories (including former collaborating laboratories) have responsibilities for health protection, which includes providing support for the investigation of local outbreaks in their catchment area, through:
  - contributing to the formulation of local contingency plans and participation in exercises
  - detection of local outbreaks through monitoring laboratory findings
  - detection and prompt reporting of unusual occurrences of public health significance
  - providing initial laboratory support for outbreaks, incidents and look-back exercises as appropriate
  - attendance of appropriate staff at local community control of infection meetings and incident/outbreak control team meetings
  - advice on appropriate investigations, interpretation of results etc
  - forwarding of appropriate specimens to reference laboratories

If outbreak specimens are normally sent to the local NHS Laboratory, then this practice can continue.

Initially, diagnostic patient specimens are likely to be examined at the local NHS laboratory. However, once an outbreak has been recognised and declared by the HPT (health protection team) or other appropriate authority, there should be a discussion
between the initial investigating (NHS) laboratory or HPT and the lead microbiologist or
duty consultant microbiologist in the Cambridge laboratory to decide on testing of
additional specimens and the method of transport. If either the number of specimens
expected is likely to exceed the capacity of the local NHS laboratory or requires
specialist tests, then the specimens should be referred to the nearest PHE laboratory or
PHE collaborating centre (but please contact us first to discuss laboratory requirements,
transport etc).

If a local NHS laboratory is unable to provide this support at any time, for whatever
reason, PHE will make arrangements to ensure that these services continue to be
provided. If any difficulties with existing or new arrangements are encountered, please
contact the Lead Public Health Microbiologist on 01223 216814 or Head of Operations
on 01223 257021, who will make sure that arrangements are securely in place.

6 Definition of a public health microbiology specimen

A public health microbiology specimen is usually submitted to determine the cause and
extent of an outbreak in a community (institution, family group or the wider community)
or to see whether an observed cluster of cases is related and constitutes an outbreak.

Specimens may also be submitted to detect spread and contain and/or prevent an
outbreak (eg diphtheria, group A streptococcus).

Patient specimens may also be submitted for clearance purposes (eg faeces for
Escherichia coli O157) or to detect carriage of pathogens in asymptomatic individuals
(eg Salmonella typhi).

The list below provides some of the circumstances in which public health specimens
may be submitted. (This list is not exhaustive.)

- in the investigation of an outbreak, eg diarrhoea and vomiting in a nursing home or
  other institution
- suspected food poisoning in a group or community
- respiratory symptoms in an institution, eg suspected Influenza
- to check for clearance of certain pathogens (see above) in individuals working in
  high-risk situations, eg food handlers or those working with children or other
  vulnerable groups
- screening of contacts of index cases, eg diphtheria, poliomyelitis
- look-back exercises, eg carriage of blood borne viruses in a healthcare worker
- TB contact tracing
• investigation of a cluster of cases, eg Legionnaires’ disease, which could have a common source

Such specimens are usually submitted at the request of:
• senior staff of a health protection team (HPT)
• an environmental health officer
• at the request of, or on behalf of, the director of public health or consultant in communicable disease control
• at the instigation of the lead microbiologist, eg for specialist typing in the investigation of episodes of healthcare associated infection

7 Collection of specimens

In order to provide the best quality results, it is essential that good specimens are collected properly and at the appropriate time. It is also important that they are transported to the laboratory safely and without undue delay (See Appendix 1 for safety considerations).

Inappropriate specimens or those that are inadequately labelled (see request form), damaged or leaking are liable to be discarded. Should this occur, every attempt will be made to inform the sender so that a second specimen can be collected.

Both the request form and specimen container must be labelled with:
• patient’s full name
• hospital/clinic number or NHS number
• the date the sample was taken
• patient’s date of birth
• patient’s postcode

The information will assist us in the surveillance of communicable diseases. Please provide full details of where to send the result and who to contact if we need to report an urgent, significant result. Please provide an Outbreak Number if available.

Sample collection and submission: Please ensure that all details are completed on the request form before it is given to the patient. Ask the patient to complete all details on the specimen container before collecting the specimen.

These must include:
• first name
• second name
• date of birth
7.1 Faeces

The specimen size should be at least 5ml. The following methods can be used to collect a specimen:

- the patient or carer should wear disposable gloves
- toilet paper can be crumpled into the toilet bowl or suspended across the toilet bowl in a crisscross to make a sling.
- a clean plastic container can be positioned in the toilet bowl
- cling film can be stretched across the top of the toilet bowl
- contamination with urine should be avoided
- a portion of faeces can then be collected with a wooden tongue depressor or the spoon provided in the specimen pot and transferred to the specimen container
- the specimen pot should then be sealed into the specimen bag and the form included in the pocket provided
- all materials should be placed in a plastic bag that is sealed before disposal in the refuse bin

Please ensure that all details on both the specimen and accompanying request form are completed. Failure to do so may lead to rejection of the specimen.

Please give full clinical details and brief details of the outbreak on the request form. In outbreak situations or when unusual pathogens may be implicated, it is essential to discuss the request with one of our consultant microbiologists before submission of specimens.

Faecal samples will be examined for the presence of:

- salmonella
- shigella
- *E. coli* O157
- campylobacter
- cryptosporidium and giardia species, if clinically appropriate
- *Clostridium difficile* in all patients over the age of 65 years and where clinically indicated, eg in nursing home or care home outbreaks

Please discuss with a member of the laboratory staff should you suspect any of the following pathogens:

- *Vibrio cholerae*
- diarrhoeagenic *E. Coli* (other than *E. coli* O157)
- *Yersinia enterocolitica*
- enteric parasites

Please also discuss with a member of laboratory staff if you suspect food poisoning due to:
- *Staphylococcus aureus*
- *Clostridium perfringens*
- *Bacillus cereus*

Should the clinical history suggest infection with viral pathogens, this too should be clearly indicated on the request form.

When a viral aetiology is suspected, faeces for virology will be routinely investigated for norovirus/rotavirus.

Additional viral pathogens can be sought (Adenovirus, Astrovirus, Sapovirus); please discuss with the duty virologist.

### 7.2 Throat/pharyngeal swabs

For detection of carriage of *Neisseria meningitides*, the swab should be taken through the mouth (sweeping posterior pharynx behind the uvula).

For detection of group A streptococcus, swab the tonsillar area.

For detection of *Corynebacterium diphtheriae*, nose and throat swabs should be submitted. If infection with *C. diphtheriae* is suspected on clinical grounds, a microbiologist should be contacted without delay (ie without waiting for confirmation by culture). One suspected case of diphtheria requires urgent public health action.

### 7.3 Viral respiratory specimens

Occasionally, outbreaks of influenza occur in institutions. The incident management team will advise when specimens from these outbreaks need to be submitted. Please seek the advice of the virology laboratory on what specimens are required and how these should be submitted.

‘Flu’ kits can be obtained from the laboratory (these include instructions for collection).

### 7.4 Sputum

Please contact the laboratory to discuss the submission of specimens. Should you need to submit sputum specimens to examine for the presence of mycobacteria, eg in cases of suspected tuberculosis, please contact laboratory consultant medical staff for advice and discussion before submitting any specimens.
7.5 Urine

Fresh urine specimens (in a clean universal container) may be required for the diagnosis of Legionnaires’ disease

7.6 Serum

Specimens of clotted blood may be required for:
- investigation of clusters of atypical pneumonia
- look-back exercises to detect the transmission of blood borne viruses, by arrangement with laboratory/incident or outbreak management team

8 Methods of specimen submission

8.1 Direct submission to the laboratory

This method of submission is available to all local authorities submitting samples to the laboratory. Specimens can be delivered to the Microbiology Laboratory Reception on Level 6 of the pathology block during the following hours:

Monday to Friday: 9am to 5pm
Saturday, Sunday and public holidays: 9am to 4pm

Outside of these core operational hours, specimens may be passed through the secure specimen hatch outside the laboratory doors on level 6.

8.2 Submission to the laboratory via GP surgeries

It may be possible for local authorities to submit samples via GP surgeries. This is only possible where it has been clearly established that GP surgeries connect with transport services that deliver samples to the Cambridge Laboratory at Addenbrooke’s.

8.3 Submission to the laboratory via other hospital pathology departments

There are daily transport runs to the Cambridge Laboratory from Papworth and Hinchingbrooke and East & North Herts. Samples may be dropped off at these locations for transportation to the Cambridge Laboratory, by prior arrangement.

Note: An agreement must be reached with the hospitals involved and specimens must be appropriately labelled.
8.4 Submission to the laboratory via the post

Specimens should be submitted to the laboratory by post provided they are packaged according to current postal regulations. Details of postal packs are given in Appendix 3.

8.4.1 Details of how more postal packs can be obtained

Environmental health departments will be provided with an initial small supply (6) of postal transport packs for these purposes. These packs contain the appropriate packaging materials, instructions for use and a request form to accompany the specimen (see Appendix 3). Any specimens sent by post must comply with infectious substances transport regulations.

Transport of Infectious Substances is a guidance note (17/2012) produced by the Department for Transport, the Civil Aviation Authority and the Maritime and Coastguard Agency.


Further supplies of sample packs, request forms and specimen containers are available by contacting the lead PHE Laboratory in Cambridge.

8.4.2 Postage costs

A separate pack should be used for each specimen. Local authorities are expected to provide postage and it is not expected that patients should pay. Specimens must be sent by first class post.

8.5 Submission to the laboratory using an agreed PHE courier

In special circumstances, related to the nature or scale of the outbreak, the Head of Laboratory Operations at the lead PHE Public Health Laboratory may, by agreement, organise courier transport, additional specimen containers and any other materials.
9 Investigation of local outbreaks

Environmental health officers, health protection teams and general practitioners can continue to refer specimens for investigation of individual cases of infection and small community outbreaks using their local NHS laboratories, if this has been their practice.

If an outbreak control team is convened by the health protection team, and specimen numbers exceed or are likely to exceed the capacity of the NHS laboratory, the specimens should be referred to the lead PHE Public Health Laboratory or collaborating laboratory, after discussion with a senior member of the PHE laboratory staff. Mechanisms for the continued investigation of the outbreak will then be agreed by the outbreak control team.

As soon as an outbreak is recognised (of whatever size), the HPT/lead PHE laboratory or collaborating centre will assign an outbreak number/identifier (eg HPZone number) and this should be used to identify specimens associated with the outbreak or incident.

If an outbreak is identified initially by an environmental health department (EHD) or health protection team, the outbreak specimens should be referred to the PHE Public Health Laboratory in Cambridge under an outbreak number/identifier, if one has been allocated by the EHD or HPT.

Note: Food, water or environmental samples should be sent to the PHE FW&E microbiology laboratory at Colindale, and you should continue to follow current protocols to maintain the integrity of the samples during transport unless notified otherwise. (NB: not all should be refrigerated.)

PHE Food, Water and Environmental Microbiology Network Health Protection Agency
Microbiology Services
Food, Water & Environmental Microbiology Laboratory, London,
61 Colindale Avenue
London NW9 5EQ

Tel: 0208 327 6548/6550/6549
FAX: 0208 327 6542

For specimens other than faeces; please contact the Laboratory Manager to arrange the provision of appropriate collection kits.
10 Other communicable diseases

Less common infections may require different specimen types or have less distinct storage and transport needs. In such circumstances, please consult with senior clinical or laboratory staff before taking and submitting specimens.

11 Test turnaround times

Information on tests performed and approximate turnaround times (TATs) can be found in our Laboratory Handbook, which is available at this link:


Alternatively, information can be obtained direct from the laboratory on 01223 257037.

12 Reporting results

Results will be reported as hard copy printouts and distributed via established routes. Electronic reporting facilities are also available depending on the compatibility of computer systems. Urgent results will be telephoned or sent to a secure fax by agreement.

13 Complaints procedure

A complaint relating to public health microbiology may be made via any normal means of communication; normally to the Lead Public Health Microbiologist, or the Regional Head of Laboratory Operations (or via the laboratory’s Governance Manager). All complaints will be dealt with according to PHE’s complaints procedures. Further information can be found at:

https://www.gov.uk/government/organisations/public-health-england/about/complaints-procedure
Appendix 1: Sample submission safety considerations

1.1 Health and safety

The specimen containers and mail transport systems provided by the laboratory should be used. The individual who requests or takes specimens from patients known to be infectious must ensure that both the form and specimen bag are appropriately labelled.

It is essential, where the requester knows or strongly suspects that the patient is infected with a dangerous pathogen, that this specific information is provided with every specimen or request form. Where clinical or epidemiological information indicate the possibility of a hazard group 4 pathogen (eg recent return with fever from West Africa) it is essential that sample submission, patient referral etc. is discussed immediately with a consultant microbiologist.

1.2 Packaging of specimens

Specimens should be placed in the appropriate specimen container, which must be securely fastened and any accidental spillage cleaned immediately, with an appropriate chlorine-containing disinfectant (see below for details).

Each specimen should be placed in a clear plastic, double (‘marsupial’), self-sealing bag with one compartment containing the request form and the other the specimen. See http://www.who.int/ihr/publications/who_hse_ihr_2012.12/en/

Where a needle has been used to obtain the specimen, the needle should be disposed of safely into an approved sharps container at the point of use, and not included in the packet transported to the laboratory.

Packaging of specimens from patients should be placed in the appropriate specimen container, which must be securely fastened and any accidental spillage cleaned immediately with an appropriate chlorine-containing disinfectant: 10,000ppm available chlorine for blood spillage (do not use on urine spills), 1,000ppm for surface disinfection.

NB: Undiluted domestic bleach contains 100,000ppm available chlorine.
1.3 Packaging of high-risk specimens

Specimens from patients in the “infection risk from blood” category should be placed in the appropriate specimen container, which must be securely fastened and any accidental spillage cleaned immediately with an appropriate chlorine-containing disinfectant: 10,000ppm available chlorine for blood spillage (do not use on urine spills), 1,000ppm for surface disinfection.

NB: Undiluted domestic bleach contains 100,000ppm available chlorine.

This should be placed in a clear plastic, double (‘marsupial’), self-sealing bag with one compartment containing the request form and the other the specimen. The specimens should then be placed in a second (outer) plastic bag and appropriately labelled. All specimens and forms should be clearly labelled with an “Infection risk from blood” label.

1.4 Transport of specimens

Specimens packaged as above must be transported to the laboratory in a robust, lidded, washable transport box. Do not use ordinary envelopes or ‘jiffy’ bags for transportation. Do not staple or puncture polythene bags.

1.5 High-risk incidents and safety

Universal precautions should be observed and appropriate personal protective equipment should be worn when specimens are collected. (Sterile gloves to take blood, masks, protective eyewear and a plastic apron if splashing of blood or other body fluids is likely to occur.) Any inoculation incidents (needlesticks or contamination of conjunctiva, mucous membranes or broken skin, with blood or body fluids), must be reported as soon as possible—within two hours—to your occupational health service so that any action required can be instituted promptly.

THIS PROCEDURE MUST BE FOLLOWED WHETHER OR NOT THE PATIENT IS PERCEIVED TO BE HIGH RISK.
Appendix 2: Request form

Public Health England Cambridge Laboratory
Request Form for Clinical Public Health Samples only

OUTBREAK NUMBER:

| Laboratory Address: PHE Public Health Laboratory Cambridge, Box 236, Cambridge University Hospitals NHS Foundation Trust, Cambridge Biomedical Campus, Hills Road, Cambridge, CB2 0QW | Request number: For Laboratory use only |

Patient Details

<table>
<thead>
<tr>
<th>Surname*</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>FIRST NAME</em></td>
<td></td>
</tr>
<tr>
<td>Date of Birth * (dd/mm/yyyy)</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
</tr>
<tr>
<td>NHS Number</td>
<td>Postcode</td>
</tr>
</tbody>
</table>

* Fields marked with an asterisk are mandatory. Failure to complete all 3 may lead to rejection of the specimen

Date of sample collection (dd/mm/yyyy) | Sample type (faeces, swab, serum, etc) please state site of sample, eg throat, skin etc

Sender Details

<table>
<thead>
<tr>
<th>Local Authority Name</th>
<th>HPU or Other (please specify)</th>
</tr>
</thead>
</table>

Investigating officer

<table>
<thead>
<tr>
<th>Address</th>
</tr>
</thead>
</table>

Telephone number

<table>
<thead>
<tr>
<th>Email</th>
</tr>
</thead>
</table>

Fax number

<table>
<thead>
<tr>
<th>Postcode</th>
</tr>
</thead>
</table>

**ENTERIC Investigation**

<table>
<thead>
<tr>
<th>Clinical Details</th>
<th>Other Details</th>
<th>Investigations Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diarrhoea</td>
<td>Sporadic Case</td>
<td>Enteric outbreak - (please give suspected pathogen)</td>
</tr>
<tr>
<td>Fever</td>
<td>Follow-up Case</td>
<td></td>
</tr>
<tr>
<td>Vomiting</td>
<td>Household</td>
<td></td>
</tr>
<tr>
<td>Blood in stool</td>
<td>Contact Food</td>
<td></td>
</tr>
<tr>
<td>Recent travel (please give place &amp; dates below)</td>
<td>Handler Possible Outbreak Antibiotics, (please state name and dates)</td>
<td></td>
</tr>
</tbody>
</table>

**NON-ENTERIC Investigation**

<table>
<thead>
<tr>
<th>Clinical Details</th>
<th>Other Details</th>
<th>Investigations Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please state :-</td>
<td>Sporadic Case</td>
<td>Suspected pathogen eg. Influenza, meningococcus etc</td>
</tr>
<tr>
<td>Recent travel (please give place &amp; dates below)</td>
<td>Follow-up Case</td>
<td></td>
</tr>
<tr>
<td>Household Contact</td>
<td>Household</td>
<td></td>
</tr>
<tr>
<td>Possible Outbreak Antibiotics, (please state name and date)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 3: Postal packaging for faecal samples

A. Components for submission of samples

B. Simple sample in transport container

C. Multiple samples in one transport container

Instructions to EHO’s and patients for sending enteric specimens

1. Place sample inside the sterile universal faeces container, making sure you do not overfill the container. Please ensure that you fill in the label on the sample container clearly.
2. Place the container inside the plastic transport vial with the pad of absorbent material (SUPASORB) and ensure that the lids on both the faeces container and transport vial are securely closed.

3. Place the transport the vial inside the cardboard transport box. Please complete the request form clearly and as fully as possible.

4. Multiple samples can be submitted in the same transport container. Ensure that there is sufficient absorbent material for the content. Each sample must be in a separate bag to prevent contamination should a leak occur. Place request forms around the outside of the plastic transport container within the cardboard transport box.

5. Place the transport box, together with the completed request form, into the addressed opaque plastic envelope (UN3373), attach stamps and post. Please ensure that you put the address of the referring EHO on the rear of the envelope.
Appendix 5: Additional specimen types that may be submitted to laboratory

Swabs can be submitted to the laboratory for testing. Please note that there are different types for viral and bacteriology (MC&S) investigations

These samples must be transported to the laboratory using the mechanism given for faecal samples (Appendix 3).

**Viral swab**
Snap off into red capped tube containing viral transport medium

**Swab for MC&S**
Swab is placed into long transport tube containing charcoal agar
# Appendix 5: The Bristol Stool Chart

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Separate hard lumps, like nuts (hard to pass)</td>
</tr>
<tr>
<td>2</td>
<td>Sausage-shaped but lumpy</td>
</tr>
<tr>
<td>3</td>
<td>Like a sausage but with cracks on its surface</td>
</tr>
<tr>
<td>4</td>
<td>Like a sausage or snake, smooth and soft</td>
</tr>
<tr>
<td>5</td>
<td>Soft blobs with clear-cut edges (passed easily)</td>
</tr>
<tr>
<td>6</td>
<td>Fluffy pieces with ragged edges, a mushy stool</td>
</tr>
<tr>
<td>7</td>
<td>Watery, no solid pieces. <strong>Entirely Liquid</strong></td>
</tr>
</tbody>
</table>