



Public Health  
England

Protecting and improving the nation's health

# **Specialist Microbiology Network Public Health Laboratory, Birmingham**

## **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's National Infection Service incorporates epidemiologists, microbiologists, infection specialists, modellers, statisticians and other disciplines required to deliver a world-class service. Working with partners in the UK and internationally, the collective aim is to protect the population from infectious disease and reduce the burden of infectious disease.

PHE has seven specialist microbiology laboratories across England. Each lead laboratory provides:

- microbiology support for the investigation, management and control of infection and outbreaks of communicable disease 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. Access to additional testing capacity will usually be made in agreement with the regional microbiologist
- support for both regional and national capacity to respond to specific events of potential public health importance
- testing for look-back exercises for health protection teams (HPTs), NHS trusts, clinical commissioning groups (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 requirements

- efficient and timely communications with public health organisations, both within the PHE (including HPTs) and externally – for example, local authorities and health teams involved in communicable disease control
- all PHE diagnostic laboratories have CPA accreditation and are in the process of transition to UKAS ISO15189:2012 accreditation. The Food, Water and Environment (FW&E) laboratories are recognised as EU Official Testing Laboratories and are accredited by UKAS

## 2 Lead public health laboratory for the West Midlands

PHE Public Health Laboratory Birmingham is based at Heart of England NHS Foundation Trust, Bordesley Green, East Birmingham, B9 5SS

In addition to its clinical diagnostic microbiology role, the PHE lead laboratory in Birmingham provides a range of public health microbiology services, including:

- 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 NHS trusts/HPTs in the specialist investigation of healthcare associated infection

These public health microbiology services are available to:

- staff in HPTs
- local authority staff and directors of public health
- CCGs/clusters
- NHS trusts

The laboratory is part of a network of specialised PHE laboratories across England. This network includes laboratories testing food water and environmental samples and the major reference units at PHE Colindale and PHE Porton. 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. It is also available on the PHE website at the link below. A separate handbook documents the clinical diagnostic and research services of the Birmingham laboratory.

<https://www.gov.uk/search?q=public+health+laboratory+birmingham>

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

PHE Food, Water and Environmental Microbiology Services (Birmingham Laboratory), Department of Pathology, Good Hope Hospital, Rectory Road, Sutton Coldfield, Birmingham, B75 7RR

Tel: 0121 424 3255

Email: Unit Head, [moira.kaye@phe.gov.uk](mailto:moira.kaye@phe.gov.uk) or Laboratory Manager, [deborah.fenelon@phe.gov.uk](mailto:deborah.fenelon@phe.gov.uk)

## 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) in the first instance so that appropriate arrangements for investigation can be made:

Duty clinical microbiologist on 0121 424 3240.

### 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.

Please phone 0121 424 3111.

### 3.2 General enquiries

For enquiries about laboratory results, please phone the results enquiry telephone line on 0121 424 3111.

### 3.3 Key laboratory personnel

Lead Public Health Microbiologist  
Professor Peter Hawkey  
[peter.hawkey@heartofengland.nhs.uk](mailto:peter.hawkey@heartofengland.nhs.uk)  
0121 424 2500

Clinical Services Director  
Dr Husam Osman  
[husam.osman@heartofengland.nhs.uk](mailto:husam.osman@heartofengland.nhs.uk)  
Tel: 0121 424 2513

Regional Operations Manager  
Jane Shirley  
[jane.shirley@heartofengland.nhs.uk](mailto:jane.shirley@heartofengland.nhs.uk)  
0121 424 1249

Laboratory Manager  
Sarah Gardiner  
[sarah.gardiner@heartofengland.nhs.uk](mailto:sarah.gardiner@heartofengland.nhs.uk)  
0121 424 0251

Public Health Services & Training  
Manager  
Karen Reynolds  
[karen.reynolds@heartofengland.nhs.uk](mailto:karen.reynolds@heartofengland.nhs.uk)  
0121 424 3250

Laboratory Administrator  
Louise Taylor  
[louise.taylor@heartofengland.nhs.uk](mailto:louise.taylor@heartofengland.nhs.uk)  
0121 424 0717

Enteric Laboratory  
Lead: Comfort Okeudo  
[comfort.okeudo@heartofengland.nhs.uk](mailto:comfort.okeudo@heartofengland.nhs.uk)  
0121 424 3111

Mycobacteriology Laboratory:  
Lead: Priti Rathod  
[priti.rathod@heartofengland.nhs.uk](mailto:priti.rathod@heartofengland.nhs.uk)  
0121 424 3111

Molecular Biology/Virology Manager  
Judith Workman  
[judith.workman@heartofengland.nhs.uk](mailto:judith.workman@heartofengland.nhs.uk)  
0121 424 1225

PA to Professor Hawkey  
Samantha Cole  
[Samantha.cole@phe.gov.uk](mailto:Samantha.cole@phe.gov.uk)  
0121 424 2500

Laboratory Duty Manager  
0121 424 3250

Duty clinical microbiologist  
0900–1700 hrs (Mon–Fri)  
0121 424 3240

Duty clinical virologist  
0900–1700 hrs (Mon–Fri)  
0121 424 2000 bleep 2821

For details of/access to the Food, Water and Environment Testing Service in the West Midlands, please contact:

Laboratory Manager

Deborah Fenelon

[deborah.fenelon@phe.gov.uk](mailto:deborah.fenelon@phe.gov.uk)

0121 424 7242

or

Laboratory Administrator

Caron Willis

[caron.willis@phe.gov.uk](mailto:caron.willis@phe.gov.uk)

The website address is [fwelabbirmingham@phe.gov.uk](mailto:fwelabbirmingham@phe.gov.uk)

Access to food, water and environmental testing in the East Midlands can be obtained from:

PHE Food, Water and Environmental Microbiology Services (York Laboratory),  
National Agri-Food Innovation Campus, Block 10, Sand Hutton, York, YO41 1LZ

Tel: 01904 468 948 Fax: 01904 468 082

The website address is [yorkfwelab@phe.gov.uk](mailto:yorkfwelab@phe.gov.uk)

### 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 clinical specimens.

Out-of-hours: 1700 – 0900hrs weekdays; weekends and bank holidays.

For the on-call duty clinical microbiologist/virologist, please contact via the switchboard on 0121 424 2000.

To contact on-call staff for specific delivery arrangements during out-of-hours periods phone the switchboard on 0121 424 2000.

## 4 Laboratory location, working hours and access details

The laboratory is located at the rear of the hospital site, accessible via the Yardley Green Road entrance. Entrance to the laboratory is via the Pathology Specimen Reception, which is signposted. Out-of-hours specimen delivery needs to be made to the Blood Bank. This is clearly signposted on entering the Yardley Green Road entrance as you approach the Pathology block.

The link leads to a site map

<http://www.heartofengland.nhs.uk/wp-content/uploads/Heartlands-map.jpg>

Postal address:

PHE Public Health Laboratory, Birmingham Heart of England NHS Foundation Trust,  
Bordesley Green East Birmingham, B9 5SS

Website: <https://www.gov.uk/the-midlands-public-health-laboratory-services>

### 4.1 Laboratory working hours

Monday to Friday: 0700 – 2000

Weekends and Bank Holidays: 0800 – 1600

Please contact the laboratory in advance of submission, with details of the incident/outbreak and investigations required.

Please notify the laboratory of the ILOG/outbreak identifier if one has been assigned.

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

## 5 NHS laboratories and access to public health testing in the Midlands

All NHS laboratories (including former collaborating laboratories) have responsibilities for health protection, which include 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 and interpretation of results
- forwarding of appropriate specimens to reference laboratories

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 HPU or other appropriate authority, there should be a discussion between the initial investigating NHS laboratory or HPU with the regional microbiologist or duty consultant microbiologist in the lead 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.

If a local NHS laboratory is unable to provide this support at any time, for whatever reason, the 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 0121 424 2500, Public Services Manager on 0121 424 3250 or Head of Operations on 0121 424 1249 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, for example, diphtheria, group A streptococcus.
- Patient specimens may also be submitted for clearance purposes (eg faeces for *E. 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, for example, 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, 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
- tuberculosis contact tracing
- investigation of a cluster of cases such as Legionnaires' disease, which could have a common source

Such specimens are usually submitted at the request of:

- senior staff of an HPT
- an environmental health officer
- at the request or on behalf of the Director of Public Health or consultant in communicable disease control
- at the instigation of the regional 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 may be collected.**

**Both the request form and specimen container must be labelled with at least 2 patient identifiers, such as:**

- patient's full name
- patient's date of birth
- patient's postcode
- hospital/clinic number or NHS number
- date the sample was taken

The above 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.**

### 7.1 Sample collection and submission

Please ensure that all details are completed on the request form and sample container 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

#### 7.1.2 Faecal specimens

The specimen size should be at least 5ml if liquid, approx.. walnut-sized if solid. There are several methods to collect a specimen, advice is available on request.

### **The patient or carer should wear disposable gloves.**

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.

An incident number (ILOG) should be allocated to each outbreak.

Faecal samples will be examined for the presence of:

- Salmonella
- Shigella
- *E. coli* O157
- Campylobacter
- *Cryptosporidium* and giardia species as a routine
- *Clostridium difficile* in all patients with diarrhoea over the age of 65 years and where clinically indicated (eg in nursing home or care home outbreaks).

Please discuss with the consultant microbiologist if you suspect any of the following pathogens:

- *Vibrio cholerae*
- Diarrhoeagenic *E. coli* (other than *E. coli* O157)
- *Yersinia enterocolitica*
- Enteric parasites
- Food poisoning due to *Staphylococcus aureus*, *Clostridium perfringens* or *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.

### **7.1.2 Throat/pharyngeal swabs**

For detection of carriage of *Neisseria meningitidis*—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 *Corynebacterium 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.**

### 7.1.3 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 duty virologist on what specimens are required and how these should be submitted.

Flu kits can be obtained from the laboratory (and include instructions for collection).

### 7.1.4 Sputum

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

### 7.1.5 Urine

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

### 7.1.6 Serum

Specimens of clotted blood 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.

## 7.2 Methods of specimen submission

To request specimen collection kits, contact the Public Health Services and Training Manager on 0121 424 3250 or 0782 708 3205 or via email to [karen.reynolds@heartofengland.nhs.uk](mailto:karen.reynolds@heartofengland.nhs.uk). Alternatively, contact Elisha Mesquitta on 0121

424 3236 or [Elisha.mesquitta@heartofengland.nhs.uk](mailto:Elisha.mesquitta@heartofengland.nhs.uk). Please see the Heart of England NHS Foundation trust website for further details of specimen types:  
[www.heftpathology.com](http://www.heftpathology.com)

### 7.2.1 Direct submission to the laboratory

This method of submission is available to all local authorities submitting samples to the laboratory. See Section 4 for specimen drop-off information.

### 7.2.2 Submission to the laboratory via other hospital pathology departments

Many hospitals have daily transport to the Public Health Laboratory, Birmingham. Specimens for forwarding can be submitted to the following hospital pathology receptions for onward transport to the laboratory:

- Good Hope Hospital Pathology Reception
- Solihull Hospital Pathology Reception

### 7.2.3 Submissions to the laboratory via post

Specimens can be submitted to the laboratory by post provided they are packaged according to current postal regulations. Details of postal packs are given in Appendix 4.

#### 7.2.3.1 Obtaining more postal packs

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

[www.dft.gov.uk/426155/425453/800\\_300/infectioussubstances.pdf](http://www.dft.gov.uk/426155/425453/800_300/infectioussubstances.pdf)

Further supplies of sample packs, request forms and specimen containers are available by contacting the Public Health Laboratory, Birmingham. Please contact the Public Health Services and Training Manager on 0121 424 3250 or 07827 083205 or email [karen.reynolds@heartofengland.nhs.uk](mailto:karen.reynolds@heartofengland.nhs.uk).

### 7.2.4 Submission to the laboratory using an agreed PHE courier

In special circumstances, possibly relating to the nature or scale of the outbreak, the head of operations at the lead PHE laboratory may, by agreement, organise courier transport, additional specimen containers and any other materials.

## 8 Investigation of local outbreaks

Environmental health officers, HPTs and GPs 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 HPT, and specimen numbers exceed or are likely to exceed the capacity of the NHS laboratory, the specimens should be referred to the PHE 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/PHE laboratory will assign an outbreak number/identifier 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 HPT the outbreak specimens should be referred to the PHE laboratory in Birmingham under an outbreak number/identifier if one has been allocated by the EHD or HPT.

**For specimens other than faeces; please contact the duty consultant microbiologist/virologist or public health services manager to arrange the provision of appropriate collection kits.**

Note: Food, water or environmental samples should be sent to the PHE's Birmingham FW&E microbiology laboratory and you should continue to follow current protocols to maintain the integrity of the samples during transport unless notified otherwise.

(Not all should be refrigerated).

PHE Food, Water and Environmental Microbiology Services (Birmingham Laboratory)  
Department of Pathology, Good Hope Hospital, Rectory Road, Sutton Coldfield,  
Birmingham, B75 7RR. Tel: 0121 424 9241

## 9 Other communicable disease

Less common infections may require different specimen types or have less distinct storage and transport needs. In such circumstances, please consult the duty consultant microbiologist/virologist before taking and submitting specimens.

## 10 Test turnaround times

Information on tests carried out and approximate turnaround times can be found in Appendix 5 and also in our laboratory handbook, which is available at: [www.heftpathology.com](http://www.heftpathology.com)

Alternatively, information can be obtained direct from the laboratory. Please call 0121 424 3111.

For communication about high priority specimens or any concerns during regular working hours, please call the duty clinical microbiologist/virologist.

## 11 Reporting results

Results will be reported by electronic reporting facilities, where available. Hard copy printouts can also be produced – especially where electronic reporting is not possible – and distributed via established routes. Electronic reporting facilities are available depending on the compatibility of computer systems. Urgent results will be telephoned or sent by agreement to a secure fax or secure email.

# 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 the request form.

## 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.hse.gov.uk/aboutus/meetings/committees/acdp/080609/acdp-92-p5g.pdf>

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.

Note: 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 padded envelopes 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 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 required action can be instituted promptly.

**THIS PROCEDURE MUST BE FOLLOWED WHETHER OR NOT THE PATIENT IS PERCEIVED TO BE HIGH RISK.**

# Appendix 2: Request form



Microbiology & Virology Investigations

## Heart of England NHS Foundation Trust Microbiology & Virology GP Request Form

NHS No: «PATIENT\_Current\_NHS\_Number»  
 Surname: «PATIENT\_Surname»  
 Forename: «PATIENT\_Forename1»  
 Sex: «PATIENT\_Sex»  
 DOB: «PATIENT\_Date\_of\_Birth»  
 Patient category: NHS Patient.

Practice Code: **M 8 9 X X X Practice Name**  
 Practice name, Practice Address, Postcode  
 Tel: 0121 373 9999.

GP Code: **GP Name**  
**GP CODE**  
 Patient Address «PATIENT\_House» «PATIENT\_Road»  
 «PATIENT\_Locality» «PATIENT\_Town»  
 «PATIENT\_Postcode»  
 Patient Tel No «PATIENT\_Main\_Comm\_No»

Clinical Details:

Date of Request: «SYSTEM\_Date»

Signature: \_\_\_\_\_

Priority? Routine

Specimen Types: \_\_\_\_\_

Collected by: \_\_\_\_\_

<input type="checkbox"/>	Investigation	Tube
<input type="checkbox"/>	Hepatitis B Immunity	PL
<input type="checkbox"/>	Hepatitis Screen	PL
<input type="checkbox"/>	Rubella Immunity	PL
<input type="checkbox"/>	Varicella Zoster Immunity	PL
<input type="checkbox"/>	Other Tests	

For Laboratory Use Only:

Date & Time Sample collected  
 / / : : \_\_\_\_\_

<input type="checkbox"/>	Investigation	Tube
<input type="checkbox"/>	Pregnancy Test	U
<input type="checkbox"/>	MSU C&S	UBA
<input type="checkbox"/>	CSU C&S	UBA
<input type="checkbox"/>	Faeces C&S	FX
<input type="checkbox"/>	Sputum C&S	U
<input type="checkbox"/>	HVS C&S	CS
<input type="checkbox"/>	Endocervical Swab C&S	CS
<input type="checkbox"/>	Swab C&S (Specify Site below)	CS

Other C&S (Specify Sample Type below)

<input type="checkbox"/>	Chlamydia Urine	U
<input type="checkbox"/>	Chlamydia Endocervical Swab	CCK

GM.T040V1-H06FT.MRFT.IPS.AUG10

Laboratory Accession Number:

Date & Time Received:

# Appendix 3: Outbreak request form



**Public Health Laboratory Birmingham**

**Request Form for Clinical Public Health Samples only**

Public Health Laboratory Birmingham  
Heart of England NHS Foundation Trust  
Bordesley Green East  
Birmingham  
B9 5ST

**\*Incident Number**

Patient Details			
SURNAME*			Address
FIRSTNAME*			
Date of Birth* (dd/mm/yyyy)			
Gender	Male <input type="checkbox"/>	Female <input type="checkbox"/>	
NHS Number			Postcode
* Fields marked with an asterisk are mandatory. Failure to complete may lead to rejection of the specimen			

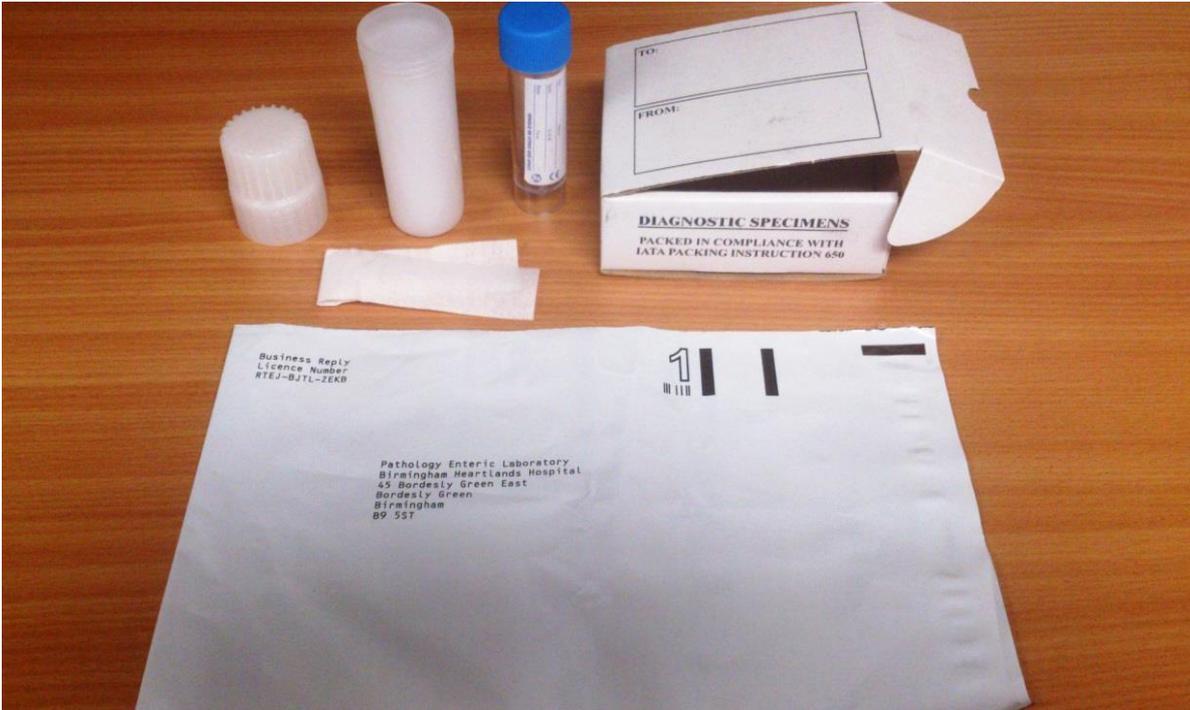
Date of sample collection (dd/mm/yy)	Sample type e.g Throat swab, faeces, serum	Date of onset:

Sender Details	Local Authority Name:	
	*Result to ( GP/HPU):	
	Copy of result to:	
Investigating officer		Address
Telephone number		e-mail
Fax number		Postcode

	Clinical Details	Other Details	Investigations Required
ENTERIC Investigation	<input type="checkbox"/> Diarrhoea <input type="checkbox"/> Fever <input type="checkbox"/> Vomiting <input type="checkbox"/> Blood in stool <input type="checkbox"/> Other (please state below) <input type="checkbox"/> Recent travel (please give place & dates below)	<input type="checkbox"/> Sporadic Case <input type="checkbox"/> Follow-up Case <input type="checkbox"/> Household Contact <input type="checkbox"/> Food Handler <input type="checkbox"/> Possible Outbreak <input type="checkbox"/> Antibiotics, (please state name & dates below)	<input type="checkbox"/> Enteric outbreak – (please give suspected pathogen) <input type="checkbox"/> Single organism investigation please state) e.g. salmonella, E.coli 0157 <input type="checkbox"/> Virology e.g. Norovirus – please state below <input type="checkbox"/> Other e.g. C. perfringens– please state below
	<input type="checkbox"/> Please state:-  <input type="checkbox"/> Recent travel (please give place & dates below)	<input type="checkbox"/> Sporadic Case <input type="checkbox"/> Follow-up Case <input type="checkbox"/> Household Contact <input type="checkbox"/> Possible Outbreak <input type="checkbox"/> Antibiotics, (please state name & dates below)	<input type="checkbox"/> Suspected pathogen – please state eg. Influenza, meningococcus ,iGAS

**Comments and /or further information: continue overleaf if necessary**

## Appendix 4: Postal packaging for faecal samples



Instructions to environmental health officers (EHO) 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 and that there are a minimum of two patient identifiers on the sample container.
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 vial inside the cardboard transport box. Please complete the request form clearly and as fully as possible, ensuring there is a minimum of two patients identifiers. Include an incident (ILOG) number if possible.
4. 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: Tests available at PHE Public Health Laboratory Birmingham

<b>Test description</b>	<b>Turnaround times</b>
Urine MC&S (Neg)	2 days
Urine MC&S (Pos)	3 days
Wounds C&S (Neg)	3 days
Wounds C&S (Pos)	4 days
Tissue MC&S	3 days
Fluids Sterile & PD MC&S	3 days
CSF	1 day
Single-organism screen	2 days
MRSA Screening (Single Swab)	2 days
MRSA Screening (Dual Swab)	2 days
CPE Screening	2 days
STD Screen	4 days
Genital (HVS, Endocervical MC&S)	3 days
Upper Respiratory	3 days
Blood Culture Set	3 days
Antibiotic Assay (Gent)	2 days
Antibiotic Assay (Tob)	2 days
Antibiotic Assay (Vanc)	2 days
Lower Respiratory	5 days
Lower Respiratory Complex (cf)	5 days
Mycology	4 days
<b>Rejects</b>	
Void specimens	2 days
<b>CL3</b>	
Enteric Culture	4 days
Parasitology OCP Concentration	4 days
Parasitology Non-concentrate (Giardia/Crypto)	4 days
Clostridium difficile GDH Screen	2 days
Primary Mycobacteria Isolation	2 days
TB PCR Complex	4 days
<b>Bacterial Molecular Biology</b>	
CDIF ribotyping	14 days
VTEC PCR	4 days
16S r DNA	7 days
<b>Serology</b>	
EBV EBNA	4 days
EBV Confirmation	4 days

Helicobacter IgG	5 days
Helicobacter E IgG	5 days
Hepatitis E IgM	5 days
HIV Confirmation	7 days
Herpes simplex Virus Antibody	4 days
Measles IgG	4 days
Measles IgM	4 days
Mumps IgG	4 days
Mumps IgM	4 days
Parvovirus IgG	4 days
Parvovirus IgM	4 days
Syphilis confirmation	7 days
Syphilis IgM	7 days
VZV IgG	4 days
VZV IgM	4 days
Cryptococcus Antigen	4 days
Legionella Urine Antigen detection (Combined test)	4 days
Pneumococcal Urine Antigen	4 days
Dried Blood Spot (BBV)	5 days
<b>Managed Service</b>	
Antenatal screen	5 days
CMV IgG	5 days
CMV IgM	5 days
Hepatitis A IgG	5 days
Hepatitis A Igm	5 days
Hepatitis B anti HBc	5 days
Hepatitis B anti HBc IgM	5 days
Hepatitis B anti HBe	5 days
Hepatitis B e Antigen	5 days
Hepatitis B anti HBs	5 days
Hepatitis B sAg Confirmation	5 days
Hepatitis B sAg screen	5 days
Hepatitis C Antibody screen	5 days
HIV ½ Ag/Ab screen	5 days
Rubella IgG	5 days
Rubella IgG	5 days
Toxoplasma IgG	5 days
Syphilis total antibody	5 days
<b>Virology</b>	
Rotavirus EIA	3 days
<b>Real Time PCR</b>	
Norovirus PCR	3 days
Respiratory PCR (with influenza)	3 days
Respiratory PCR (Standard)	3 days

Swine flu	3 days
Respiratory PCR (Additional)	3 days
Genital HSV	4 days
Genital Ulcer Disease	5 days
Eye swab	3 days
Skin swab	3 days
Mouth swab	3 days
Faecal PCR	4 days
CMV PCR Urines (children only)	3 days
Urine Immunocompromised	5 days
CSF PCR	3 days
Adenovirus PCR	3 days
CMV PCR Qualitative	3 days
EBV PCR	5 days
Enterovirus PCR	3 days
Herpes simplex virus PCR	3 days
Polyomavirus PCR	5 days
Varicella zoster PCR	3 days
Pneumocystis PCR	3 days
Bordetella PCR	5 days
Measles PCR	5 days
HHV6 PCR	5 days
<b>Molecular (PCR)</b>	
<i>Neisseria gonorrhoea</i> & Chlamydia DNA	5 days
Chlamydia DNA	5 days
Hepatitis B PCR Quantitative (Viral Load)	8 days
Hepatitis C PCR Quantitative	6 days
Hepatitis C Genotyping	14 days
HIV PCR Quantitative (Viral Load)	6 days
HPV PCR	1 day
<b>Antiviral resistance testing</b>	
CMV UL97 sequencing	14 days
Hepatitis B polymerase sequencing	14 days
HIV sequencing	14 days
HIV PCR amplification only	20 days
HIV genotyping (CCR5) plasma PCR x3	22 days
HIV genotyping (CCR5) PBMC	22 days
HIV fusion inhibitor (T20)	22 days
HIV integrase	22 days
HIV sequencinf (RT/protease + integrase)	22 days
HIV sequencing (RT/protease + integrase + T20)	22 days
HIV2 sequencing	22 days