Title	**SAMPLE COLLECTION & HANDLING**
Unique identifier	**PAT/SOP/043**
Version	**1.4**
Date issued	**July 2026**
Review frequency	**BIENNIAL**
Authorisation	**BCPS Management**
Location	**Website, Quality Office**

The electronic copy of this document is the only version that is maintained. Printed copies must not be relied upon to contain the latest updates and amendments.

All processes and procedures described herein are mandatory within the Black Country Pathology Services.

Contents

1 INTRODUCTION

1.1 Scope and purpose

This document outlines the procedure in place to ensure the validity of results through the proper collection, storage and the timely arrival of specimens in Pathology at minimum risk to both laboratory and non-laboratory personnel.

It should be recognised that any specimen is potentially infectious or radioactive and it is therefore necessary to ensure that all specimens are safely contained and transported from the patient to the laboratory. This document describes the procedures essential to ensure safe containment and transport of the sample. Risks of infection of personnel involved in transport may not be fully eliminated; however, they can be kept to a minimum.

It is important that specimens are transported promptly and efficiently, especially in the case of urgent specimens. With fast laboratory analysers and electronic reporting specimen transport can often be the rate-limiting step in test turnaround times and delays may adversely affect samples.

1.2 Responsibility

The Discipline Lead/ department manager is responsible for the arrangements for processing specimen(s) on receipt into the laboratory and will ensure appropriate audit trails are available for tracking the request as it is processed.

The user of the service is responsible for ensuring that the request form is completed in full and accompanied by an appropriate labelled sample in accordance with [PAT/SOP/025].

The requesting practitioner (normally a clinician) or sample collector must ensure the sample is safely packaged for transport to the laboratory and identify specimens known to be of 'high risk' by labelling in such a way that staff can identify it easily and are able to take the appropriate precautions. This is essential to ensure the protection of laboratory and hospital staff from accidentally acquiring an infectious disease.
For transportation issues and concerns, contact the appropriate Trusts switchboard and request transport department.

1.3 References

ISO 15189: 2022 Medical laboratories- Requirements for quality and competence [PAT/EXT/001]

HSE. ACDP Guidance 'Biological Agents: managing the risks in laboratories and healthcare premises' [PAT/EXT/007].

PRE04 Handling, transport, processing and storage of blood specimens for routine laboratory examinations [PAT/EXT/087].

WHO Guidance on regulations for the transport of infectious substances [PAT/EXT/081]

UKHSA Avian influenza: Guidance, data, and analysis [PAT/EXT/008]

UKHSA Rare and imported pathogens laboratory [PAT/EXT/009]

PAT/SOP/025 Specimen acceptance and rejection

PAT/RA/035 FMEA Pre assessment risk

PAT/FOR/043 BCPS Request form

2 INFORMATION FOR USERS ON SAMPLE COLLECTION AND HANDLING

Information for patients and users is available via website:
www.bcpathology.org.uk

For patients or users who do not have access to the intranet printing material can be provided upon request.

2.1 Information for patients

The main sources of information for patients is the information accessed on the BCPS website, access to Lab Tests Online (www.labtestsonline.org.uk) which provides information on pathology investigations and guidance material for the preparation and/or collection of samples.

Lab tests online contains peer reviewed information for patients and is available in several languages and as an application (app) for mobile devices. Lab Tests Online® UK is certified for compliance to the Health Net Online Code of Conduct for Medical and Health website.

2.2 Information for users

The website content includes guidance/ information on specimen requirements, transport services, specimen acceptance and rejection policy and key performance data i.e. turnaround times.

The information provided includes the test database, which provides information on the repertoire of investigations provided and a link to Lab Tests On-line is also provided.

The website includes contact details which enables users to raise queries.

The website also enables users to submit orders for supplies provided by the Transport Department based at Bentley Bridge, using the electronic consumable request form. Please allow at least 24 hours for delivery; please note no deliveries take place during weekends and bank holidays.

2.3 Request form

A BCPS wide request form that can be used for requests to all departments is available on QPulse [PAT/FOR/043] and on the BCPS website WCA_1980_23.10.24_V_5.pdf

Criteria for labelling specimens, completion of request forms and ‘add-ons’ can be found in [PAT/SOP/025].

Additional investigations requested (known as ‘add ons’) are only processed if the sample is still suitable for testing; information regarding the time interval for requesting add-ons is available on the test database.

3 SPECIMEN CONTAINERS

Specimen containers must be sufficiently robust to withstand the stresses likely to be put upon them and must not leak under normal use. Sample containers required can be identified from the test database on the website and if appropriate arranged in the ‘order of draw’.

Containers, which are to be used more than once, must withstand autoclaving or disinfection and must remain leak-proof after each recycling process. Damaged containers must be discarded and not reused.

Breakages and leaks outside the laboratory should be reported to laboratory reception staff as soon as possible. Reception staff will alert their line manager and/or senior member of staff; the incident must be recorded in the risk management software (Datix/ Safeguard) and investigated as appropriate.

The person sending the specimen must ensure that the container is suitable for the purpose, that it is properly closed/ sealed and that it is not externally contaminated by the contents.

Containers used for the transport of specimens to and from the pathology laboratories should not be selected without prior consultation with the relevant Discipline Lead and / or the Health & Safety Lead. They should meet the WHO Guidance on regulations for the transport of infectious substances [PAT/EXT/081]

4 LABELLING

Please refer to [PAT/SOP/025] for full details of identification requirements for specimens and request forms. All self-adhesive labels to be applied by the user must be approved for use. Electronic requests provide printed specimen(s) labels which should be used. Labels must never be licked.

The sample collector or requesting practitioner must ensure the patient is correctly identified and consent from the patient whom the sample is to be taken is obtained prior to sample collection.

Every specimen container must be labelled clearly with the patient's identifiers in accordance with [PAT/SOP/025]. Inadequately completed request form information or improper labelling of specimen containers may lead to delays in processing or rejection of the request impacting patient care [PAT/RA/035].

4.1 Labelling for 'danger of infection'

It is the responsibility of the person who requests a laboratory test to ensure that both the form and the container are correctly labelled to indicate danger of infection.

Full details for labelling specimens for 'danger of infection' are contained within [PAT/SOP/025].

4.2 Labelling specimens that contain cytotoxic drugs

Specimens from patients who are being treated with cytotoxic drugs may contain some unchanged drug or active metabolite. To prevent skin contact, these specimens must be treated as high risk except that the label used on the request from should state 'cytotoxic drugs'.

4.3 Labelling potentially radioactive samples

Samples from patients treated with radioactive iodine pose a low risk to laboratory workers. However this risk must be considered for any pregnant laboratory staff and incorporated into the pregnancy risk assessment completed for that member.

4.4 Labelling an aliquot sample

Aliquots need to be sufficiently labelled with the same essential data set as defined for the primary sample in [PAT/SOP/025]. The sample container needs to be appropriate to the type of sample being aliquoted.

5 SPECIMEN TRANSPORT BAGS

The container of any specimen that presents a danger of infection must be placed in the appropriate individual sample bag as soon as it has been labelled. Under most circumstances the sealable sample bag will serve this purpose. The BCPS uses coloured sample bags to enable efficient sample flow through the laboratory. The paper attached to the bags provides instructions for attaching the corresponding request form. The request form must not be allowed to come into direct contact with the specimen.

The colours used are indicated below:

Red - for the use of urgent samples

Clear - for routine pathology samples

Biohazard (clear) - for histology samples

Before transporting the sample, it must be further enclosed inside a transport bag sealed by means of an integral sealing strip. The BCPS uses the colours indicated below:

Blue - for routine microbiology samples

Green - for routine pathology samples (Blood Sciences)

Purple - for cytology samples

Pink – Bone marrow samples

All bags clearly indicate their intended use in print on the front of the bag. Bags can be purchased by via the electronic ordering system or are available from Pathology laboratory for specified locations. Bags must not be sealed with pins, staples, metal clips etc.

Note. COVID-19 samples must be double bagged and labelled with appropriately with Priority-10 or Priority-20 stickers.

For large specimens, such as some histology or 24-hour urine specimens, containers may be enclosed in individual clear plastic sacks tied at the neck. The request form must not be placed in the bag with the specimen; it should be placed in a plastic envelope, which is then tied to the neck of the sack.

Specimen transport bags must not be used more than once.

Specimens that do not present an infection hazard should be bagged as described above. The general principles to be followed are that all unnecessary hand contact with the containers should be eliminated and that leakages can be easily detected and contained.

6 SPECIMEN COLLECTION

It is the responsibility of requestor to ensure that request forms are completed in accordance with [PAT/SOP/025] and that high risk is indicated on the request form if necessary. It is the responsibility of the sample taker (may be different from requestor) to verify the patients details match the request form and ensure the sample(s) are collected into unlabeled containers and labelled appropriately directly post sample collection.

For samples collected via venipuncture the order of draw should be followed during the collection procedure. Sample container fill volumes indicated on container should be noted; under or over filled containers may impact laboratory investigations (dilution effect).

Samples are collected in designated areas across the Black Country health services in locations within primary and secondary care; there are no designated specimen collection locations within BCPS locations. Samples may also be received from outside the region (e.g. referred work, external SLA's). In accordance with ISO15189:2022, sample collection facilities must:

- Enable collection to be undertaken in a manner that does not invalidate results or adversely affect the quality of examinations.
- Consider privacy, comfort and needs (e.g. disabled access, toilet facilities) of patients and accommodation of accompanying persons (e.g. guardian or interpreter) during collection.
- Provide separate patient reception and collection areas.
- Maintain first aid materials for both patients and personnel.

7 SAMPLE TRANSPORTATION

The safe transport of pathology samples is important to ensure that all health care personnel, patients, and visitors are not put at risk of infection; to maintain the integrity of the specimen to ensure accuracy of results. It is the responsibility of everyone who handles pathology specimens to ensure that they are transported in a safe manner.

Samples collected should be transported to pathology without delay to maintain sample integrity. If there is a delay in transporting samples, please refer to the test database for requirements for storing the sample and

timeframe between collection and receipt into pathology, further advice is available from the appropriate discipline. Supporting guidance includes:

- PRE04Ed1 | Procedures for Handling, Transport, and Processing of Blood Specimens for Common Laboratory Tests, 1st Edition (clsi.org) [PAT/EXT/087]
- Best practice standards for the delivery of NHS infection services in the United Kingdom, British Infection Association' BIA_Infection_Services_Standards_Document_FINAL_June_2021.pdf (britishinfection.org) [MIC/EXT/026]

7.1 External transport

External transport, generally from General Practitioners and Trust are managed and operated by:

- RWT Transport Department- cover Wolverhampton, Walsall area
- SWBHT Transport- cover Sandwell and West Birmingham area
- DGFT contract with Mitie- cover Dudley area

Transport times are available from the appropriate provider; routes are detailed in a dashboard (www.gp-liaison.com) which is accessible via individual login and summarized in CHE/SOP/113.

Specimen bags during transportation are placed in UN3373 compliant containers. Regular scheduled and defined collections by transport drivers operates across the network (including cytology service users); collection times are provided to individual locations to enable the samples for collection to be made ready at the designated time for collection. Weekend and Bank Holiday services also operate for key sites. For further details of collection services are available from the appropriate Transport provider (contactable via the relevant Trusts switchboard).

7.2 Internal transport

These carriers should only be used for carrying pathology specimens and transport containers used must be**:**

- Made of a smooth impervious material such as plastic or metal which can be easily disinfected and cleaned and must retain liquid in the event of leakage of a specimen.

Or

- Specimen bags used during road transportation must be placed in UN3373 compliant containers.

Containers will be inspected periodically by the reception team and Safety Officer/ Safety Representative in Chemistry, who will for arrange for decontamination and cleaning to take place if necessary.

Urgent samples should not be left for the specimen collection round. It is the responsibility of the requesting practitioner to arrange transport of these samples to the pathology laboratory.

7.2.1 General collection service

Routine blood samples may be left on wards and in clinics for collection by the specimen collection service operatives. Weekday collections are made between 08:00 and 17:00. The sealed and bagged samples are collected into special specimen transport carriers for delivery to pathology.

7.2.2 Enhanced collection service

Additional internal collection service operates between 06:30 and 18:00 during weekdays for RWT. Collections are made directly from the ward phlebotomist in the morning and from specific key areas such as emergency portals across New Cross Hospital site to support fast turnaround times for key areas [CHE/FOR/1]. The aim of the service is to enable blood results to be provided in time for clinical ward rounds and to meet the 1 hour turnaround time objective for the Emergency Department (UECC). Partner Trusts utilize local portering services to support internal sample transport.

7.2.3 Pneumatic air tube system

The pneumatic air tube is managed by Partner Trusts Estates departments and is available across acute hospital sites. Deliveries of 'carrier pods' are received by the central reception area within pathology; the system is designed for rapid transport of pathology samples.

The following rules apply:

- All specimens must be sealed inside a transparent plastic specimen bag. This bag must be leak proof. The plastic bag should be attached to the request form.
- Samples for Histology must NOT be put in the air tube system.
- The sample must not be allowed to come into direct contact with request form.
- The plastic bags are placed into a carrier pod. These carrier pods must not be overfilled.
- High risk samples may only be sent by the air tube system if they are double bagged inside bio-hazard or pathology specimen bags as described above.
- Any mechanical or electrical faults or suspected system leaks must be reported on the appropriate sites Estates team as soon as possible. Sample leakage/breaks should be reported as soon as possible to pathology Health & Safety Officer, a Consultant Microbiologist or senior pathology member of staff who will provide the appropriate clean up decontamination advice or action.

7.2.4 Hand delivery

Pathology samples may be hand delivered to the appropriate reception area within pathology. This option is preferable for urgent samples.

8 TRANSPORT OF HAZARDOUS SUBSTANCES OR PATHOGENS

8.1 Transport of hazardous reagents

Bottles containing potentially hazardous reagents (e.g. histology fixatives) may only be transported inside screw top, leak proof, rigid containers. Appropriate hazard warning labels must be in place.

8.2 Transport of blood and blood products

The transport of blood and blood products must comply with MHRA and the local National Blood Service transport policy in accordance with the Blood Safety and Quality Regulations requirement to maintain the 'cold chain'. The cold chain starts from the receipt of the blood from the blood centre to the time the unit is transfused or otherwise disposed of. The details for this process can be found within [BT/SOP/022]. This document seeks to standardise the procedure for the transfer of blood and components between hospitals. It is intended as a general guide to encompass practices for all users.

8.3 Transport of infectious substances

The transport of infectious substances regulations is available on Q-pulse [PAT/EXT/081]. For transfer purposes, pathogens will be classified according to two categories A and B and will need to be packaged accordingly (appendix 1). Although these requirements apply to transport off-site, on-site transport still needs to be carried out in a safe manner.

8.3.1 Category A

An infectious substance if it is transported in a form that, when exposure to it occurs, could cause permanent disability, or life threatening or fatal disease in otherwise healthy humans or animals (appendix 1).
Note. Cultures, patient samples, biological products and medical or clinical waste may be subclassified as a Category A should the material be known to contain or reasonably expected to contain a biological agent that meets the criteria stated in [PAT/EXT/081 Annex 3].

Two UN numbers and proper shipping names associated with Category A infectious substances are:

UN2814, Infectious substances affecting humans: Infectious substances capable of causing disease in humans, or both humans and animals.
UN2900, Infectious substances affecting animals only: Infectious substances capable of causing disease only in animals.

If there is any doubt as to which category an organism belongs to it must be transported as category A (discuss with the Consultant Microbiologist). The packaging must be labelled and must be packed according to packaging instructions P620 ADR (P602 – IATA regulations). Packages must be accompanied by documentation containing details specified in ADR.

The receiving laboratory should inform consignees of receipt of Category A infectious substances within 24 hours of them being received. This also applies to the deregulated *E.coli* (verocytotoxigenic), *M. tuberculosis S. dysenteriae* type O1. However if a result is sent to the consignee within the 24 hours of the infectious substances being dispatched, it is not necessary to send a confirmation of receipt.

8.3.2 Category B

Infectious substance are sub-classified as Category B when they contain biological agents capable of causing infection in humans and animals but NOT meeting the criteria for Category A, that is, the consequences of a infection are not considered severely disabling or life-threatening.

The UN number and proper shipping name for most shipments of Category B infectious substances is

UN3373, Biological substance, Category B,

Infectious substances in Category B shall be assigned to UN3373 (Biological substance, category B) and packed in accordance to packing instructions P650 as a minimum standard. There are no requirements for documentation.

Refer to PAT/EXT/081 Section 5.2.2 flowchart for the classification of infectious substances.

8.4 Transport of suspected avian flu specimens

Contact the duty virologist at our nearest UKHSA laboratory (Heartlands Hospital, Birmingham 0121 424 000) who will assess the need for testing and arrange transfer of samples from cases fulfilling the PHE case definition for influenza [PAT/EXT/008 & PAT/EXT/009]. The laboratory should not request primary testing directly from the national reference laboratory at UKHSA Colindale.

Sample requirements are:

- At least one set of separate nose and throat swabs in viral transport medium.
- Additional respiratory tract samples should be sent if available, including endotracheal secretions, nasopharyngeal aspirate, bronchial lavage fluid and sputum.
- An acute and convalescent serum sample.

Samples must be handled at Containment Level 3. UN3373 packaging must be used for sample transport.

8.5 Packaging

8.5.1 Triple packaging

Basic triple packaging system is used to compliantly transport exempt human specimens by all modes of transport; additional requirements are required for infectious substances sub-classified as Category A or Category B.

- A primary receptacle: if substance is in liquid form, the primary receptacle there must be enough absorbent material to absorb the leak if the primary receptacle breaks.

- A second, watertight and leak proof or sift proof packaging to enclose and protect the primary receptacle and
- A third, outer layer of packaging that is used to protect the secondary packaging from physical damage while in transit.

8.5.2 Packing instruction P650 (Category B requirements)

Category B substances including those exempt from Category A can be transported in P650 packaging as a minimum standard. Containers must be marked for infectious substances of category B, UN3373.

In addition to the basic triple packaging system, stipulations outlined in P650 include the following:

- Either the secondary or outer packaging must be rigid; that is, if the outer packaging is soft, the secondary packaging must be rigid, or if the secondary packaging is soft, the outer packaging must be rigid. The latter is the most applied arrangement, because a rigid packaging is always required for air transport.
- The complete triple package must be capable of passing a 1.2m drop test, to prove that it is of an appropriate strength and quality.
- Either the primary receptacle or the secondary packaging must be capable of withstanding an internal pressure of 95kPa (0.95 bar).

For Category B substances UN3373 must be displayed on the outer packaging on a background of contrasting colour, be clearly visible and legible (letters or numbers must be at least 6mm high and the square have minimum dimension of 50mmx50mm for air transport). The UN3373 logo must NOT be obscured by any other labels. The proper shipping name (biological substance, Category B) in letters at least 6mm high must be displayed adjacent to the mark.

8.5.3 Packing instruction P620 (Category A requirements)

In addition to the components of a basic triple packaging system, packaging for Category A infectious substances must include the three layers outlined below.

- Whatever the intended temperature of the consignment, the primary receptacle or the secondary packaging must be capable of withstanding a pressure differential of not less than 95kPas, as well as temperatures in the range of -40°C to +55°C.
- When the shipment is being carried at ambient temperature (or above), the primary receptacle must be glass, metal, or plastic. A positive means of ensuring a leak proof seal should be provided (e.g. a heat seal, skirted stopper, or metal crimp seal). If screw caps are used, they should be secured by positive means.
- Lyophilised substances may also be transported in primary receptacles that are flame-sealed ampules or rubber stoppered glass vials fitted with metal seals.
- The outer packaging must be rigid and the smallest dimension of the package not less than 100mm.
- An itemised list of contents shall be enclosed between the secondary packaging and outer packaging, including the proper shipping mane and technical name in brackets of the biological agent present in the infectious substance.

Advice must be sought from the Consultant Microbiologist before transporting a Category A substance.

Cultures, even of Category B organisms, must be contained in P620 packaging. This is because cultures generally contain higher concentrations of microorganisms in a given volume compared to clinical specimens and consequently have a greater probability of releasing an infectious dose as a result of an exposure incident. The packaging Instructions are described in greater detail in [PAT/EXT/081].

9 SPECIMEN TRANSPORT OUTSIDE OF THE HOSPITAL (OTHER THAN BY POST)

Specimens must be contained in a transparent plastic sealable bag. General Practitioners who are part of the regular courier collection service will also be supplied with pathology specimen transport bags. All samples to be collected should (after sealing in a specimen bag) be placed inside the pathology transport bag, with absorbent material, and sealed to await collection.

The transport driver must place these pathology transport bags in an approved securable transport box and secure the lid. Each box must bear a warning label UN3373 and that the box must not be opened and give a contact name and telephone number if the box is found unattended. The boxes will be inspected periodically by the local relevant Transport Manager who will arrange for disinfection and decontamination by the Clinical Chemistry department when necessary. Virkon should be used to decontaminate the surfaces of the transport box.

Note: Virkon (see COSHH assessment MIC/CA/30) is harmful if the concentrate is in contact with skin or eyes and may cause irritation through dust release. Wash immediately with water and if applicable remove contaminated clothing. Do not mix with other chemicals.

Each driver must carry a spill kit and instructions. If a spillage occurs Clinical Chemistry must be contacted for instructions and the incident reported by completing a using the appropriate partner Trusts risk management reporting system (Datix/Safeguard).

9.1 Instructions for transport drivers

Collection of Pathology Specimens

Introduction

Carriage of diagnostic specimens is covered by acts of parliament even for short distances. You and your employer MUST work to current regulations which place general duties of care on everyone with a role in the transport of specimens.

1. **Pick up points will normally be the reception desk of general practitioners' surgeries. Samples for transport to pathology departments must ALL be enclosed and sealed inside a pathology transport bag together with absorbent material. All surgeries to be visited will have been supplied with these bags therefore do NOT accept un-bagged samples or samples or samples that are not properly packaged.**
2. The pathology transport bags should be placed inside a UN3373 rated transport container; before lifting the containers ensure that the lid is properly secured.
3. Place the full container in the boot or on the floor of your vehicle. **Do NOT** under any circumstances leave the loaded containers unattended in a vehicle with the doors open.
4. The delivery point is the reception area, Pathology of the relevant partner Trust, with the exception of Cytology samples which are to be delivered to location New Cross Hospital, A18. Reception staff will take the samples out and return the empty transport container.
5. All spillages and leaks should be reported as soon as possible to a senior member of staff and ask for instructions on how to proceed. Remember in the event of a spillage within the vehicle, it may not be used until decontamination has been carried out.
6. If your vehicle breaks down or you have an accident, do not let anyone touch the specimens unless you are sure they are competent to handle them and know the appropriate procedure (e.g. laboratory staff, medical staff).

IMPORTANT NOTES:

- Cover any cuts or grazes on your hands with a waterproof dressing.
- Carry all specimens in the transport bags or boxes provided, not in your hands or pockets. Always handle specimen containers gently.
- Touch specimen containers as little as possible. If you do touch them, wash your hands as soon as practicable afterwards.
- Always handle specimens gently and responsibly (not only to prevent the risk of breakage but rough handling or extremes of temperature may affect the results of the tests to be undertaken.)
- Always wash your hands before meal breaks and at the end of a spell of duty. Do not eat, drink, or smoke whilst handling specimens.
- If a specimen leaks into a transport bag or box, tell the laboratory reception staff, and ask them to make it safe.
- If a spillage does occur report the incident using Datix/Safeguard and ensure it is reported to your supervisor as soon as possible.

9.2 Instructions for Blood Transfusion external drivers

Collection of specimens from Blood transfusion laboratory to NHSBT service- used for referring sample investigations and product recalls to NHSBT. Collection is undertaken by an NHSBT driver or a NHSBT subcontractor, a Blood bike volunteer may also make collections (ad-hoc). Scheduled collections occur twice on weekdays and once on a Saturday.

1. Pick up points will be pathology/ blood transfusion. Samples for transport to NHSBT (generally Birmingham, Bristol and Liverpool sites).
2. The sealed sample should be placed inside a UN3373 rated green transport bag which contains an absorbent pad and then sealed. The transport bag must be clearly labelled with the location.
3. **Do NOT** under any circumstances leave the loaded containers unattended in a vehicle with the doors open.
4. The delivery point is Hospital Services/ main reception at NHSBT Birmingham, Vincent Drive, who will transfer the sample internally to other NHSBT site(s) as necessary.
5. All spillages and leaks should be reported as soon as possible to a senior member of staff and ask for instructions on how to proceed. Remember in the event of a spillage within the vehicle, it may not be used until decontamination has been carried out. All drivers and blood bikers must carry a spillage kit on board.
6. If your vehicle breaks down or you have an accident, do not let anyone touch the specimens unless you are sure they are competent to handle them and know the appropriate procedure (e.g. laboratory staff, medical staff).

9.2.1 Recalled units

Blood products recalled to NHSBT are collected in a dedicated container which is bought by the NHSBT driver. Units are placed in the container and returned to Hospital Services with the same NHSBT driver.

IMPORTANT NOTES:

- Cover any cuts or grazes on your hands with a waterproof dressing.
- Carry all specimens in the transport bags or boxes provided, not in your hands or pockets. Always handle specimen containers gently.
- Touch specimen containers as little as possible. If you do touch them, wash your hands as soon as practicable afterwards.
- Always handle specimens gently and responsibly (not only to prevent the risk of breakage but rough handling or extremes of temperature may affect the results of the tests to be undertaken.)
- Always wash your hands before meal breaks and at the end of a spell of duty. Do not eat, drink, or smoke whilst handling specimens.
- If a specimen leaks into a transport bag or box, tell the laboratory reception staff, and ask them to make it safe.

10 INSTRUCTIONS FOR PORTERS

Model rules for specimen collection staff and porters

Some of the work carried out by members of staff in the hospital may involve accidental contact with material that could be infectious. The following model rules for members of staff transporting samples on site should be observed:

- Wear your overall, properly fastened, especially when carrying specimens. Keep your overall separate from your outdoor clothing, not in your locker. Never wear your overall in the staff room or canteen. If you do you could spread infection.
- Cover any cuts or grazes on your hands with a waterproof dressing.
- Carry all specimens in the transport bags or boxes provided, not in your hands or pockets.
- Touch specimen containers as little as possible. If you do touch them, wash your hands as soon as practicable afterwards.
- Always wash your hands before meal breaks and at the end of a spell of duty.
- If a specimen leaks into a transport bag or box, tell the laboratory reception staff, and ask them to make it safe.
- If you drop and break a specimen, do not touch it or try to clear up the mess. Stay with the specimen to prevent other people touching it and send someone to the laboratory for help. If you spill the specimen onto your overall, you must remove it at once and then wash your hands and put on a clean overall. Report the incident using Datix/Safeguard and ensure it is reported to your supervisor as soon as possible.
- Always handle specimen containers gently.

11 TRANSPORT OF SPECIMENS BY POST

11.1 Royal Mail requirements

The laboratory must comply with the following Packaging Instructions, P620. The Royal Mail will accept infectious substances assigned to UN3373 for postage but not to UN2814. Suspected Category A criteria samples should not be sent by post. It is also recommended that samples being sent under the clinical and diagnostic exemptions criteria should not be sent by post.

For samples larger than 50ml or for non-standard packages, please contact the local Royal Mail Customer Service Centre for advice.

11.2 Royal Mail documentation

Samples will only be accepted at the request of a qualified health care professional. Samples shall only be sent first class post. Packages will only be accepted over Post Office Counters or by pre-arranged business collection.

11.2.1 Requirements for the outer package

- Compliance markings and warning diamond.
- Name and address of the consignee.
- Name and address of the sender.
- A name and emergency contact telephone number.

11.2.2 Requirements for between the secondary and outer packaging

- Name and address of the consignee.
- Name and address of sender.
- Contact name and telephone number.
- Details of sample, an itemised list of contents.
- Testing to be carried out.

11.3 Damaged Packages

Packages that are deemed unfit for the purpose will not be accepted by the accepting officer.

11.4 Non-compliances

Procedures are in place for badly packaged and non-UN approved packing. First time offenders will be given a warning; for the second offence, prosecution will be considered.

12 SPILLAGE PROCEDURE

The appropriate response in the event of exposure to any infectious substance (including one of unknown nature) is to wash or disinfect the affected area as soon as possible, regardless of the agent. Even if an infectious substance comes into contact with non-intact skin, washing of the affected area with soap and water can reduce the risk of infection. Where access to soap and water is not readily available, antiseptic hand wipes or antiseptic solutions can be used instead. The following procedure for clean-up can be used for spills of all infectious substances. Refer to Health & Safety Manual [PAT/SOP/020] for spillage procedures. Spillage kits contain specific instructions on how to clean the spillage using the kit.

13 SPECIMEN STORAGE

Where possible it is important that specimens are tested as soon as possible on receipt. The pathology test database indicates the correct storage conditions for a particular test, available on the pathology website www.bcpathology.org.uk.
Sometimes when serological investigations are requested, serum will be stored in the laboratory rather than be tested immediately. This will be because useful information will only be obtained by testing a convalescent serum sample in parallel. In all such instances a written report indicating that a specimen has been stored will be issued within one working day of receipt

14 APPENDIX

Appendix 1 ***Indicative examples of infectious substances included in Category A in any form unless otherwise indicated.***

PAT/EXT/081 Annex 3

UN number and proper shipping name: Microorganism
UN 2814 Infectious substance, affecting humans.

Bacillus anthracis (cultures only)
Brucella abortus (cultures only)
Brucella melitensis (cultures only)
Brucella suis (cultures only)
Burkholderia mallei – Pseudomonas mallei – Glanders (cultures only)
Burkholderia pseudomallei – Pseudomonas pseudomallei (cultures only)
Chlamydia psittaci – avian strains (cultures only)
Clostridium botulinum (cultures only)
Coccidioides immitis (cultures only)
Coxiella burnetii (cultures only)
Crimean-Congo haemorrhagic fever virus
Dengue virus (cultures only)
Eastern equine encephalitis virus (cultures only)
Escherichia coli, verotoxigenic (cultures only)
Ebola virus
Flexal virus
Francisella tularensis (cultures only)
Guanarito virus
Hantaan virus
Hantaviruses causing haemorrhagic fever with renal syndrome
Hendra virus
Hepatitis B virus (cultures only)
Herpes B virus (cultures only)
Human immunodeficiency virus (cultures only)
Highly pathogenic avian influenza virus (cultures only)
Japanese Encephalitis virus (cultures only)
Junin virus
Kyasanur Forest disease virus
Lassa virus
Machupo virus
Marburg virus
Monkeypox virus (cultures only)
Mycobacterium tuberculosis (cultures only)
Nipah virus
Omsk haemorrhagic fever virus
Poliovirus (cultures only)
Rabies virus (cultures only)
Rickettsia prowazekii (cultures only)
Rickettsia rickettsii (cultures only)
Rift Valley fever virus (cultures only)
Russian spring-summer encephalitis virus (cultures only)
Sabia virus
Shigella dysenteriae type 1 (cultures only)
Tick-borne encephalitis virus (cultures only)
Variola virus
Venezuelan equine encephalitis virus (cultures only)
West Nile virus (cultures only)
Yellow fever virus (cultures only)
Yersinia pestis (cultures only)

UN 2900 Infectious substance, affecting animals only.
African swine fever virus (cultures only)
Avian paramyxovirus Type 1 – Velogenic Newcastle disease virus (cultures only)
Classical swine fever virus (cultures only)
Foot and mouth disease virus (cultures only)
Goatpox virus (cultures only)
Lumpy skin disease virus (cultures only)
Mycoplasma mycoides – Contagious bovine pleuropneumonia (cultures only)
Peste des petits ruminantsvirus (cultures only)
Rinderpest virus (cultures only)
Sheep-pox virus (cultures only)
Swine vesicular disease virus (cultures only)
Vesicular stomatitis virus (cultures only)