

Policy / Procedure Information Collection of Swabs and Specimens SOP (excluding Blood Specimens) (SOP013)			
Subject	(This policy is subject to periodic review and will be amended according to service development needs)		
Applicable to	This policy applies to all staff, volunteers and contractors who work for or provide care on behalf of Nottinghamshire Hospice		
Date issued	Aug 2021		
Next review date	June 2025		
Lead responsible for Policy	Director of Care		
Policy Reviewed by	Infection Prevention and Control Team Care Service Team		
Notified to	Quality and Safety Group		
Authorised by	Board of Trustees		
Links to other Policies	Infection Prevention and Control Policy		
Summary	This document aims to provide a clear understanding of Nottinghamshire Hospices Infection Control Policy.		
Target Audience	The policy aimed at all staff, volunteers and contractors who work for or provide care on behalf of Nottinghamshire Hospice		

**IMPORTANT NOTICE:** Staff should always refer to the website folder on the universal N drive for the most up to date information. If the review date of this policy or procedure has expired staff should seek advice from their clinical lead or manager regarding the appropriate action to be taken.



#### 1. Purpose

This Standard Operating Procedure provides information to Nottinghamshire Hospice staff on the collection of specimens for investigation.

The correct collection of specimens for investigation is essential to aid an accurate diagnosis.

Successful laboratory diagnosis depends on:

- A sufficient sample.
- Specimen collection at the appropriate time, using correct technique and equipment.
- Transportation to laboratory without delay or if there is a delay in transportation, storage in specimen fridge.
- Taking the sample (where possible) prior to treatment with anti-microbial agents, to increase the chance of isolating an organism.

#### 2. Evidence base and interaction with other policies and procedures

The Health and Social Care Act 2008: Code of Practice for the Prevention and Control of Healthcare Associated Infections (HCAI) stipulates that all Health and Social Care organisations must have in place measures to ensure individuals have infections recognised promptly and treated appropriately and that healthcare workers are free and protected from exposure to communicable infections during the course of their work. This includes the safe collecting, handling and transporting of laboratory specimens (Department of Health, 2008).

It is also vital that antimicrobial agents are used appropriately in accordance with our national and local guidance and the appropriate collection and processing of laboratory swabs and samples is paramount to individuals receiving appropriate and timely treatment in accordance with the Health and Social Care Act (2008) and NICE Guidance (2019).

#### 3. Scope and responsibilities

The Infection Prevention and Control Team are responsible for updating this SOP in line with the expiry dates or if changes in national guidance occurs.

Hospice staff members working clinically are responsible for taking samples appropriately and for ensuring sample results are reviewed and action taken as required. Staff should also consider the use of the Mental Capacity Act and potential Safeguarding Issues where individual's decline to provide or have samples taken and there are doubts about their ability to make that decision. Advice and support can be gained from the Local Authority Safeguarding Team

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#### 4. Equipment required

The equipment required to undertake specimen collections varies depending on the specimen required and the investigation to be undertaken. Therefore the equipment required for each specific sample is listed at the beginning of each procedure that is listed.

#### High Risk Specimens

These include specimens from patients known or suspected to have certain infectious diseases including:

- Tuberculosis.
- Enteric fever.
- Shigella dysenteriae.
- Viral Hepatitis.
- Human Immunodeficiency Virus (HIV).
- Creutzfeldt Jacob Disease (CJD).

The nature of the hazard e.g. blood borne should be indicated on the laboratory form in block capitals. Both the form and specimen must be marked with yellow Danger of Infection labels. These labels can be obtained from the laboratory.

#### 5. Definitions

- MRSA: Meticillin Resistant Staphylococcus Aureus
- PVL: Panton Valentine Leukocidin
- SA: Staphylococcus Aureus
- MSU: Mid-Stream Urine
- CSU: Catheter Specimen of Urine



#### 6. Procedures

# Mid-Stream Urine (MSU) Clean Catch

- · Red topped urine container
- White topped urine container (If no red top available. The white top bottle needs to get to the lab as soon as possible because there is no preservative in the bottle. Must be refrigerated if there is going to be a delay).
- Single use gauze swabs
- Tap water
- Disposable Bed pan/urinal for immobile patient
- Sterile disposable receiver to collect urine
- Disposable gloves and apron
- Waste bag/ receptacle
- Urine collection device (if required) for female patient contact the Continence Service for information
- Urine collection pack (if required) for incontinent patients contact the Continence Service for information
- Laboratory request form.

Step	Action	Rationale / outcome
1.	Encourage the individual to independently undertake the procedure where possible. Ensure that the individual is fully aware of the procedure, that they consent and this is documented in the patient records.	To promote independence and reduce the risk of contamination.
2.	If the individual is undertaking the procedure, advise them to wash hands before and after the procedure	To prevent organisms from contaminating the specimen.



3.	Ask the individual to clean the following with freshly drawn tap water and single use swabs if necessary:  Female: the vulva from front to back towards the anus Male: glans penis and behind the prepuce (if possible)  The male foreskin needs to be replaced following cleaning, to prevent paraphimosis / phimosis.  If staff are undertaking the procedure, clean as above, decontaminating hands prior to and after, undertaking the procedure and ensuring that gloves and aprons are worn.	To prevent cross contamination.
4.	Ask the patient to void initial stream into the toilet/bedpan, the mid- stream to be collected into the sterile receiver and the final stream into the toilet/bedpan. If a patient cannot control the flow of urine, consider if a clean catch specimen would meet the sample needs, a urine collection device may help. For incontinent patients who cannot provide a sample in the usual way a Newcastle urine collector pad can be used. Staff can draw freshly passed urine out of the pad using a sterile syringe (label specimen and request card as 'obtained from Newcastle urine collector pad').	To obtain sterile specimen.
5.	Pour specimen directly into sterile labelled universal red topped container.	To avoid contamination.
6.	Dispose of waste as per local policy. Any excess urine to be discarded down the toilet or sluice facility. The receiver once emptied to be discarded in accordance with the waste policy. Remove gloves and apron, dispose and decontaminate hands.	To reduce the risk of contamination
7.	Samples obtained by clinicians working from a patient's home must be transported in a specimen carrier. Refrigerate urine samples if there will be a delay of more than 4 hours in reaching the laboratory.	Preservation of the sample.



# Catheter Specimen of Urine (CSU), continuous drainage

- Alcohol wipe
- Syringe 20ml
- · Red topped urine container
- White topped urine container (If no red top available. The white top bottle needs to get to the lab as soon as possible because there is no preservative in the bottle. Must be refrigerated if there is going to be a delay
- Laboratory request form
- Disposable apron and sterile gloves
- Waste bag /receptacle

Step	Action	Rationale / outcome
1.	Ensure that the individual is fully aware of the procedure to be undertaken, that they consent and this is documented in the patient records. Perform hand hygiene and put on gloves and disposable apron (refer to Aseptic Non Touch Technique policy).	To prevent contamination of the sample
2.	Wipe sampling port with alcohol wipe and allow to dry for approximately 30 seconds.	To avoid contamination of sample
3.	Using Aseptic Non-Touch Technique insert syringe tip into sample port and aspirate required amount of urine.	To avoid contamination of sample
4.	Transfer urine to labelled specimen bottle.	
5.	Remove gloves and apron and decontaminate hands.	To avoid contamination of sample
6.	Dispose of waste as per local policy and repeat hand hygiene.	To ensure safe disposal of waste and reduce the risk of cross infection
7	Label specimen and request card as CSU to advise laboratory	Enables the correct interpretation of laboratory results.
8.	Samples obtained by clinicians working from a patient's home must be transported in a specimen carrier. Refrigerate urine samples if there will be a delay in reaching the laboratory.	The bacterial content alters rapidly.



# STANDARD OPERATING PROCEDURE Catheter Specimen of Urine (intermittent catheterisation)

- Appropriate prescribed sterile intermittent catheter and procedure pack
- Red topped urine container
- White topped urine container (If no red top available. The white top bottle needs to get to the lab as soon as possible because there is no preservative in the bottle. Must be refrigerated if there is going to be a delay)
- Two Pairs of sterile gloves and disposable apron
- Sterile saline
- Sterile gauze swabs
- Laboratory request form
- Sterile disposable receiver/jug
- Waste bag/receptacle

Step	Action	Rationale / outcome
1.	Ensure that the individual is fully aware of the procedure to be undertaken, that they consent and this is documented in the patient records. Encourage the individual to independently undertake the procedure where possible. Perform hand hygiene and put on apron, open sterile equipment/ pack and prepare sterile field, opening the catheter onto the procedure pack and putting sterile saline into the galley pot or disposable tray within the pack and put on sterile disposable gloves.	Reduces risk of cross infection and complies with health and safety.
2.	The following needs to be cleaned prior to insertion of catheter using sterile saline and single use swabs Female: the vulva from front to back Male: glans penis and behind the prepuce (if possible). Please refer to the Urethral Catheterisation policy.	To reduce risk of contamination.
3.	Remove gloves and discard in clinical waste, wash hands or cleanse hands with alcohol hand rub.	To reduce risk of contamination.
4.	Apply sterile gloves and insert catheter as per Catheterisation Policy and Aseptic non- touch technique policy.	To ensure staff safely insert catheter following correct procedure in accordance with local policies. Reduces risk of contamination.



5.	Drain initial stream of urine into receiver/jug then drain mid- stream urine into universal container. Continue to empty bladder into receiver/jug.	To provide sterile mid-stream sample
6.	Remove catheter (refer to Catheterisation and Aseptic non touch technique policy). If male the foreskin needs to be replaced to prevent paraphimosis/phimosis.	To ensure safe removal of catheter in accordance with local policy.
7.	Remove gloves and apron.	To prevent risk of contamination
8.	Dispose of waste as per local waste policy and perform hand hygiene.	To Ensure safe disposal of waste.
9.	Label specimen and request card as CSU to advise laboratory.	Enables the correct interpretation of laboratory results.
10.	Samples obtained by clinicians working from a patient's home must be transported in a specimen carrier. Refrigerate urine samples if there will be a delay in reaching the laboratory.	The bacterial content alters rapidly.



# STANDARD OPERATING PROCEDURE Catheter Specimen of Urine (Catheter Valve)

- Alcohol Wipe
- Red topped urine container
- White topped urine container (If no red top available. The white top bottle needs to get to the lab as soon as possible because there is no preservative in the bottle. Must be refrigerated if there is going to be a delay)
- Disposable gloves and apron
- Sterile gauze swabs
- Laboratory request form
- Waste bag/receptacle

Step	Action	Rationale / outcome
1.	Ensure that the individual is fully aware of the procedure to be undertaken, that they consent and this is documented in the patient records. Encourage the individual to independently undertake the procedure where possible. Perform hand hygiene and put on disposable apron and gloves.	Reduces risk of cross infection and complies with health and safety.
2.	Clean the end of the catheter valve with an alcohol wipe	To reduce risk of contamination.
3.	Open the catheter valve and drain the initial stream of urine into the toilet.	To reduce risk of contamination.
4.	Drain the middle stream of the urine into the red topped urine bottle and fill to the top of the bottle.	To ensure urine from the bladder is sampled and to enable a large enough sample to be tested.
5.	Continue to empty bladder into the toilet as normal.	To completely empty the bladder
6.	Remove gloves and apron.	To prevent risk of contamination
7.	Dispose of waste as per local waste policy and perform hand hygiene.	To Ensure safe disposal of waste.
8	Label specimen and request card as CSU to advise laboratory.	Enables the correct interpretation of laboratory results.
9	Samples obtained by clinicians working from a patient's home must be transported in a specimen carrier. Refrigerate urine samples if there will be a delay in reaching the laboratory.	The bacterial content alters rapidly.



# STANDARD OPERATING PROCEDURE 24 Hour Specimen Collection

- Disposable gloves and apron
- Appropriate 24-hour specimen container
- Laboratory request form
- Disposable Bedpan/urinal/disposable jug/receiver
- Waste bag/ receptacle

Step	Action	Rationale / Outcome
1.	Ensure that the individual is fully aware of the procedure to be undertaken, that they consent and this is documented in the patient records. Explain the procedure carefully to the patient, to ensure complete collection of urine.	Results will be invalid if a sample is lost or contaminated with faeces.
2.	Ask the patient to empty the bladder at the time appointed to start the procedure. Discard this specimen.  Write the start time on the container.	To ensure all urine collected is within the 24 hours stated.
3.	Transfer all urine voided into the bedpan/ urinal/ jug/receiver in the next 24 hours into the specimen container. Measure and record output if required.	As body chemistry changes, a 24-hour collection will accommodate all the variables within that time.
4.	If staff are collecting samples then to follow the normal standard infection prevention and control principles including hand hygiene, personal protective equipment and waste disposal.	To reduce the risk of contamination.



# **Early Morning Specimen Collection**

#### **Equipment Required:**

- Disposable gloves and apron
- Appropriate specimen container
- Laboratory request form
- Disposable Bedpan/ urinal /disposable jug/ receiver
- Waste bag /receptacle

**NB:** Investigation for:

**TB** requires the whole of the first voiding of urine to be collected on 3 consecutive mornings (24 hour specimen container required). Please send each void immediately after collection.

**Pregnancy** investigation requires a sample of no more than 20mls in a sterile universal container.

Step	Action	Rationale
1.	Ensure that the individual is fully aware of the procedure to be taken, that they consent and this is documented in the patient records. Advise the patient the previous day that an early morning specimen is required.	Hormonal or bacterial levels will be at their highest in concentrated urine.
2.	Collect the specimen when produced and transfer to the container using the normal standard infection control principles. If staff are collecting the sample they must follow the hand hygiene procedure and wear personal protective equipment.	To ensure prompt investigation and reduce the risk of contamination.
3.	Dispose of waste as per local policy and decontaminate hands.	To ensure safe disposal of waste and reduce the risk of contamination.
4.	Samples obtained by clinicians working from a patient's home must use a specimen carrier where possible to transport the specimen. Refrigerate urine samples if there will be a delay in reaching the laboratory.	The bacterial content alters rapidly.



# STANDARD OPERATING PROCEDURE Sputum Specimen

- Sputum specimen pot
- Laboratory request form
- Disposable gloves and aprons
- Disposable mask if high risk of splashing or infectious pulmonary T.B.
- Disposable eye protection if high risk of splashing or infectious T.B.

Step	Action	Rationale
1.	Ensure that the individual is fully aware of the procedure to be undertaken, that they consent and this is documented in the patient records. Collect the specimen at the time of day when the patient's cough is most productive. Encourage patient to perform procedure independently if possible.	To ensure collection of sputum and not saliva. Encourages patients independence and reduces risk of contamination
2.	Gloves and aprons should be worn when collecting and handling all sputum specimens after performing hand hygiene. Facial protection should also be considered if there is a risk of splashing of sputum into the eyes or mouth.	To reduce the risk of contamination.
3.	Encourage patient to cough deeply, into the labelled sputum pot or request the assistance of a physiotherapist if patient is unable to expectorate. Place specimen pot into labelled request form.	To facilitate expectoration.
4.	Remove gloves and apron and any other protective equipment,	To reduce risk of cross contamination
5.	Dispose of waste as per local policy and perform hand hygiene.	To ensure safe disposal of waste and reduce the risk of cross infection.
6.	Samples obtained by clinicians working from a patient's home must be transported in a specimen carrier. Send specimen and request form to the laboratory as soon as possible. Refrigerate sputum samples if there will be a delay in reaching the laboratory.	Bacterial content alters rapidly. Early dispatch improves accuracy.



# **STANDARD OPERATING PROCEDURE**Sputum Specimen from Tracheostomy

#### **Equipment Required:**

- Bronchoscopy specimen collector
- · Appropriate sized suction catheter
- Sterile 0.9% normal saline if required
- Sterile gloves and disposable apron; face protection if risk of sputum splashing into eyes or face
- Waste bag/ receptacle
- Suctioning via a tracheotomy tube

Step	Action	Rationale
1.	Ensure that the individual is fully aware of the procedure to be undertaken, that they consent and this is documented in the patient records. Perform hand hygiene and apply disposable apron and sterile gloves.	To reduce the risk of cross infection.
2.	Attach bronchoscopy specimen collector to suction circuit adhering to Aseptic non touch technique policy.	To trap sputum specimen in collector.
3.	Attach suction catheter and apply suction.	To aid collection of specimen.
4.	Use sterile normal saline to gently flush catheter if necessary.	To ensure small/sticky specimens are flushed into the container. If flushed with force, sample may be lost.
5.	Seal collector and place in labelled request form.	Ensure correct reporting of the sample, to assist the microbiology department in analysing the sample and subsequent advice regarding treatment.
6.	Remove gloves and apron.	Reduces risk of contamination.
7.	Dispose of waste as per local policy and perform hand hygiene.	To ensure safe disposal of waste and reduce the risk of cross infection.
8.	Samples obtained by clinicians working from a patient's home must be transported in a specimen carrier. Send specimen and request form to the laboratory as soon as possible.	The bacterial count alters rapidly. Early dispatch will improve accuracy.

NB: Masks and eye protection should be worn, along with gloves and aprons, when collecting sputum specimens from possible or known patients with infectious pulmonary TB and the specimen treated as high risk. The sample and request card needs to specifically request for the testing of TB, because it is not a routine test for the laboratory.



# Methicillin Resistant Staphylococcus Aureus (MRSA) Screening

- Swabs with bacterial transport medium
- Container for urine sample if required
- Sputum Pot if patient has a cough and is expectorating
- Normal saline
- Laboratory request form (place all samples in same bag)
- Sterile and /or non-sterile gloves and disposable apron NB when taking samples from different sites protective clothing will need to be changed)
- Waste bag/receptacle

Step	Action	Rationale
1.	If a screen is required, please ensure that the individual is fully aware of the screens to be taken and that they consent to the procedure and this is documented in the patient records.	Ensure the patient is aware of their diagnosis and why the screens are being taken.
2.	Perform hand hygiene and apply disposable apron and non-sterile gloves.	To prevent cross infection
3.	A nasal swab –one from both nostrils, pre-moisten the swab with saline if needed and roll around both nostrils towards the back of the nostrils and not just the tip of the nose.	To ensure a good specimen is obtained for testing
4.	A swab from the perineum or groin.	In line with national guidance for MRSA screening
5.	Swab all wounds/broken areas of skin, as per taking a wound swab ensuring the site is documented on each individual swab and the laboratory request form.	In line with national guidance for MRSA screening
6.	Urine from catheterised patients only or MSU if MRSA has been isolated in a urine specimen previously (as per CSU or MSU procedure).	In line with national guidance for MRSA screening
7.	A sputum sample if the patient is expectorating (as per sputum procedure).	In line with national guidance for MRSA screening
8.	Swabs from invasive medical devices such as PEG tubes, tracheostomies and supra-pubic catheter sites.	In line with national guidance for MRSA screening
9.	Mark the laboratory request form clearly for a MRSA screen and why the screen is being performed i.e. is it an elective screen or a screen following treatment. Samples obtained by clinicians working from a patient's home must be transported in a specimen carrier. Send specimen and request form to the laboratory as soon as possible.	To ensure the correct test occurs in the laboratory and results are received in a timely manner.



	If using the ICE system to request the test then ensure MRSA screen is requested.	
10.	Remove gloves and apron.	Reduces risk of contamination.
11.	Dispose of waste as per local policy and perform hand hygiene.	To ensure safe disposal of waste and reduce the risk of cross
		infection.



# Panton - Valentine Leukocidin (PVL) Screening

- Swabs with bacterial transport medium
- Container for urine sample if required
- Sputum Pot if patient has a cough and is expectorating
- Normal saline
- Laboratory request form (place all samples in same bag)
- Sterile and /or non-sterile gloves and disposable apron (NB when taking samples from different sites protective clothing will need to be changed)
- Waste bag/receptacle

Step	Action	Rationale
1.	Please mark the laboratory request form clearly as a PVL screen and why the screen is being performed i.e. is it an elective screen due to a history of boils or abscesses, or a screen following treatment.	To ensure the correct test occurs in the laboratory and results are received in a timely manner.
2.	If a screen is required, please ensure that the individual is fully aware of the screens to be taken and that they consent to the procedure. This should be documented in the patient records.	Ensure the patient is aware of their diagnosis and why the screens are being taken.
3	Perform hand hygiene and apply disposable apron and non-sterile gloves	Perform hand hygiene and apply disposable apron and non-sterile gloves
4.	Nose swab (anterior nares) – one swab can be used for both nostrils. Pre moisten-swab with sterile saline if needed, gently rotate in both nostrils and place in transport medium	To ensure a good specimen is obtained for testing
5.	A swab from the Perineum or groin.	In line with national guidance for PVL screening
7.	Wound swab – including boils, carbuncles, cellulitis, purulent eyelid infection	In line with national guidance for PVL screening
8.	A sputum sample if productive cough	In line with national guidance for PVL screening



9.	Mark the laboratory request form clearly for a PVL screen and why the screen is being performed. Samples obtained by clinicians working from a patient's home must use a specimen carrier to transport the specimen. Send specimen and request form to the laboratory as soon as possible.  If using the ICE system to request then ensure the test requested is for PVL and not MRSA screening.	To ensure the correct test occurs in the laboratory and results are received in a timely manner.
10.	Remove gloves and apron.	Reduces risk of contamination.
11	Dispose of waste as per local policy and perform hand hygiene.	To ensure safe disposal of waste and reduce the risk of cross infection.
12	The Infection Prevention and Control Team will conduct a risk assessment with each individual case in conjunction with the lead clinician and advise on the infection prevention and control measures. Employment history should be sought from all cases to inform the risk assessment.	To identify risk factors in line with national guidance.



## **Wound Swab**

All wounds will have bacteria colonising them, however this is not necessarily detrimental to the healing process and therefore routine swabbing of wounds is unnecessary.

Swabbing is needed if signs of infection are present, to ensure appropriate antibiotic therapy is prescribed. A wound displaying any of the two following signs should be swabbed:

- Erythema
- Swelling
- Localised heat
- Increase or change in exudate
- Abscess formation/pus
- Offensive or worsening odour
- · Systemic signs e.g. pyrexia
- Delayed healing
- Wound breakdown
- Pocketing at wound base
- Epithelial bridging
- Friable granulation tissue
- Discolouration of wound bed
- Increased or unexpected pain

(Guideline for the use of Antimicrobial Wound Care Products available on the POD)

- Wound swab or universal specimen container
- Normal saline
- Laboratory request form
- Disposable sterile or non-sterile gloves and apron
- Waste bag/receptacle



Step	Action	Rationale
1.	Ensure that the individual is fully aware of the procedure to be undertaken, that they consent and this is documented in the patient records. Following hand hygiene apply disposable plastic apron and non-sterile gloves to remove dressings to assess the wound.	To prevent cross infection and to observe for signs of wound infection.
2.	If any two signs of infection are present, a wound swab is required. Explain the need for a swab and the procedure to the patient.	To ensure that the patient understands why a swab is required and to give their consent for the procedure to take place.
3.	Ensure the wound is cleaned prior to taking a swab (Stott's 1995). If however the wound bed is clearly visible and there is no dressing material, or heavy exudate present, then cleaning is not necessary.	To remove any dressing material and exudate that has accumulated, allowing bacteria from the wound surface to be sampled.
4.	Remove the swab from the packaging and apply light pressure across the whole wound surface in a zigzag manner rotating the swab simultaneously between the finger and thumb (Lawrence 1993) and insert the swab into the transport medium.  NB: If the wound bed is dry, moisten the swab with sterile normal saline.  NB: If pus is draining from the wound it is preferable to collect this in a universal specimen container.	To ensure a detailed bacterial analysis of the wound surface is collected as different bacterial groups colonise in clusters (Bowler & Davis 1999).  To assist the collection of bacteria from the wound surface.  To enhance a more accurate bacterial analysis.
5.	Remove gloves and apron and decontaminate hands.	To reduce the risk of cross infection.
6.	Put on new gloves, sterile or non-sterile depending on the dressing. Redress the wound following the Aseptic Non Touch Technique policy and refer to the Guideline for the use of Antimicrobial Wound Care Products.	To promote a healing environment and reduce risk of infection
7.	Remove gloves and apron.	To reduce the risk of cross infection.
8.	Dispose of waste as per local policy and perform hand hygiene.	To ensure safe disposal of waste and reduce the risk of cross infection.
9.	Complete the required patient details on the swab container and laboratory request form, ensuring clinical details of the infection are described and the site of the wound is documented Also provide information regarding current or recently completed antibiotic therapy.  Send to the laboratory as soon as possible. Clinicians must use a specimen carrier when transporting from the patients home.	To ensure correct reporting of the swab taken and to assist the microbiology department in their analysis of the swab and subsequent advice regarding treatment.  To ensure prompt delivery to microbiology department



NB: If the daily collection has been missed, swabs should be stored in a designated specimen fridge overnight.

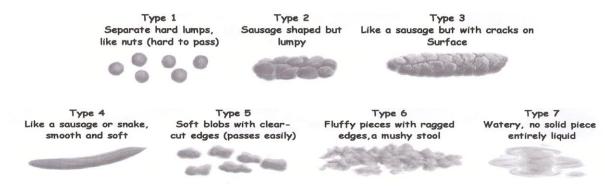
## **Collection of Faeces for Investigation**

Faeces may require examination and investigation for various reasons. As a general rule, the collection of the specimen will be the same irrespective of the investigation. However, a number of investigations will require specific guidelines, e.g. examination for faecal occult blood, faecal fat collection. It is important that the nurse ascertains the specific requirements from the relevant laboratory, e.g. clinical pathology, microbiology if there is any doubt regarding requirement.

Stools may contain infectious micro-organisms. When diarrhoea occurs it can be assumed that large numbers of micro-organisms are also present. As the diarrhoea abates the risk of infection diminishes. Once an infectious cause for diarrhoea is isolated it is generally unnecessary to send repeat specimens, unless requested by the laboratory or Infection Prevention and Control Team or Public Health England. However if the first sample is negative and the diarrhoea continues further samples may be required.

If an individual presents with diarrhoea, which the World Health Organisation define as the passage of 3 or more liquid stools per day or more frequently than is normal for that individual (WHO 2019) or type 5-7 as per Bristol Stool Chart (*Clostridium difficile* Infection DH, 2008b) and the cause is unknown, then both bacterial and viral causes must be considered. The request card should ask for culture and sensitivity testing and *C difficile* must be requested if suspected. If the individual has taken antibiotics within the last month, this information should be given on the specimen request form e.g. which antibiotic, dose, date of commencement and length of course.

According to the Bristol Stool Chart, diarrhoea would constitute a type 5, 6 or 7 stool as shown below. Anything else would not be considered diarrhoea.





To enable laboratory staff to determine the appropriate method of investigation it is essential that a concise history is given. This should include where appropriate:

- Other infectious sources, e.g. other patient, family member, school friend etc.
- Recent foreign travel
- Suspect food
- Recent or current antibiotics
- Other relevant illnesses
- Immunosuppression
- Type of symptoms and duration, time of onset after a suspected meal is also relevant

- Disposable gloves and apron
- Appropriate specimen bottle (with spatula attached)
- Sterile syringe if required
- Disposable receiver/Bedpan and paper cover
- Specimen transportation bag and laboratory request form
- Waste bag/receptacle

Step	Action	Rationale
1.	Ensure that the individual is fully aware of the procedure to be undertaken, that they consent and this is documented in the patient records. Encourage the individual to independently undertake the procedure where possible.	To promote independence and reduce the risk of contamination.
2	If the individual is undertaking the procedure, advise them to wash hands before and after the procedure.  If staff are undertaking the procedure, they need to decontaminate hands prior to undertaking the procedure and ensure that gloves and apron are worn.	To prevent organisms from contaminating the specimen. To reduce risk of contamination
3.	Provide disposable receiver for patient's use together with a labelled specimen container.	To obtain a fresh specimen and facilitate laboratory identification of microorganism.
4.	Observe specimen for colour, consistency, volume, blood and note smell etc. Choose the sample from any unusual or obviously abnormal part of the stool.	To identify abnormalities.



5.	Using the spatula provided, spoon a portion of the faeces into the container (at least one third of the pot 10-15 mls of liquid stool). If stool is loose a sterile syringe can be used.	To ensure adequate number of micro-organisms are present and an adequate amount for the test.
6.	Remove gloves and apron.	To minimise the risk of contamination.
7.	Dispose of waste as per local waste policy and perform hand hygiene.	To ensure safe disposal of waste and reduce the risk of cross infection.
8.	Complete the required patient details on the sample container and laboratory request form, ensuring clinical details of the infection are described and documented. Also provide information regarding current or recently completed antibiotic therapy. Clinicians must use a specimen carrier when transporting from the patients home. Store sample in fridge if there will be a delay in dispatch to the laboratory.	Clostridium difficile toxin biodegrades at room temperature and may result in a false negative sample.

**Faecal Occult Blood:** To ensure accurate analysis, three consecutive specimens should ideally be collected. Collect faeces as outlined previously, however, a large sample is not required (walnut size is sufficient). Obtain sample as before from the centre of the specimen.

Collection of Specimen of Threadworms: Threadworms are easily identified by examination of the peri-anal skin especially at night. If laboratory investigation is required, do not send a faecal specimen. Threadworm ova are best collected onto adhesive transparent tape by pressing the tape onto the peri-anal skin and then taping the tape to a glass slide. The glass slide can then be transported to the laboratory in the slide mailers containers used for cytology screening. GP Practices have a supply of these. Slide mailers are durable and safe and are white with a clip flip top lid. Alternatively use a dry swab and roll around the peri-anal area.



# **Conjunctival Swab**

Taking a swab of the eye's secretions is generally adequate for the identification of bacteria. However, for Viral culture and Chlamydia where the organisms are intra cellular it is necessary to obtain epithelial cells. If both viral and Chlamydial tests are required, two separate swabs into the correct transport medium must be taken. Where possible take the swab before any eye drops have been instilled.

- Disposable gloves and apron
- Culture swab with appropriate transport medium (chlamydia kit or viral swab for viruses)
- Laboratory request form
- Waste bag/receptacle

Step	Action	Rationale
1.	Ensure that the individual is fully aware of the procedure to be undertaken, that they consent and this is documented in the patient record. Position patient sitting upright with head slightly back and supported.	To facilitate ease of procedure.
2.	Perform hand hygiene and apply disposable gloves and apron	To minimise the risk of cross infection.
3.	Gently pull down lower eyelid and instruct patient to look upwards.	To expose the palpebral conjunctiva, and to avoid risk of injury to the cornea.
4.	Apply the swab firmly, but avoiding undue pressure, along the palpebral conjunctiva from inner to outer lower eyelid. A twisting action of the swab may facilitate cell collection.	To collect epithelial cells,.
5.	Remove swab from conjunctiva and instruct patient to close eyes briefly.	For comfort.
6.	Place swab in transport media, culture end first, and ensure bottle or tube cap is fitted. (The swab stick should be broken or cut, to ensure the swab fits safely into the transport medium). Ensure swabs are labelled right and left eye accordingly.	For safe transport.
7.	Remove gloves and aprons.	To minimise the risk of contamination.
8.	Dispose of waste as per local waste policy and perform hand hygiene.	To ensure safe disposal of waste and reduce the risk of cross infection.
9.	Clinicians must use a specimen carrier when transporting from the patients home. Send specimen promptly to the laboratory.	To ensure prompt attention.



## **Nasal Swab**

If tests for both bacterial and viral infection are required, two separate swabs must be taken and put into the correct transport medium.

#### **Equipment Required:**

- Disposable gloves and apron
- Swab with bacterial transport medium if concerned re bacterial infection/carriage. Viral transport medium if concerned about viral infection such as flu.
- 0.9% sterile normal saline solution
- Waste bag /receptacle

Step	Action	Rationale
1.	Ensure that the individual is fully aware of the procedure to be undertaken, that they consent and this is documented in the patient records. Perform hand hygiene and apply disposable apron and gloves.	To reduce risk of contamination.
2.	Ask patient to blow nose.	To avoid contamination of specimen by nasal secretions.
3.	Ask the patient to tilt their head slightly backwards.	To facilitate easy access to nasal passages.
4.	Take swab of anterior nares of nostrils by gently rotating and directing the swab upward into the nostril. The swab may be moistened with normal saline as this is less irritating to nasal mucosa. One swab may be used for both nostrils then insert swab into transport medium.	It is not necessary to differentiate one nostril from another for diagnostic purposes.
5.	Remove gloves and apron.	To reduce risk of contamination.
6.	Dispose of waste as per local waste policy and perform hand hygiene.	To ensure safe disposal of waste To reduce risk of contamination.
7.	Complete the required patient details on the swab container and laboratory request form, ensuring clinical details of the infection are described and this is documented. Also provide information regarding current or recently completed antibiotic therapy. Clinicians must use a specimen carrier when transporting from the patients home. Store sample in fridge if there will be a delay in dispatch to the laboratory.	To optimise patient treatment

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## **Throat Swab**

If tests for both bacterial and viral infection are required, two separate swabs must be taken and put into the correct transport medium.

- Disposable gloves and apron
- Sterile swab and transport medium
- Disposable tongue depressor
- Receptacle for dentures if appropriate
- Vomit bowl
- Additional light source, if required
- Viral medium, if required
- Waste bag/receptacle

Step	Action	Rationale
1.	Ensure that the individual is fully aware of the procedure to be undertaken, that they consent and this is documented in the patient records. Perform hand hygiene and apply disposable gloves and apron.	To reduce risk of potential cross infection.
2.	Explain procedure to the patient and warn that this may cause a gagging reaction, hence need for vomit bowl.	To reassure the patient that this is a normal response and provide receptacle if they should vomit.
3.	Obtain a good view of the throat prior to swabbing. Use the tongue depressor to aid better vision of the throat and ask the patient to say "Ah".	To optimise obtaining a good sample.
4.	Gently but firmly rotate the swab in exudate from one or both anterior fauces (back of the throat)	To obtain specimen.
5.	When collecting specimen, avoid touching the lips, cheeks, tongue or teeth with swab.	Normal flora may contaminate specimen.
6.	Place into the appropriate transport medium.	For safe transport
7.	Remove gloves and apron.	To reduce the risk of cross infection.
8.	Dispose of waste as per local policy and perform hand hygiene.	To ensure safe disposal of waste To reduce the risk of cross infection.
9	Complete the required patient details on the swab container and laboratory request form, ensuring clinical details of the infection are described and documented Also provide information regarding current or recently completed antibiotic therapy.	To optimise patient treatment



Clinicians must use a specimen carrier when transporting from the patients home. Store sample in fridge if there will be a delay in dispatch to the laboratory.

# Aural (ear) Swab

- Disposable gloves and apron
- Sterile swab and bacterial transport medium
- Waste bag/receptacle
- Additional light source, e.g. angle poise lamp

Step	Action	Rationale
1.	Ensure that the individual is fully aware of the procedure to be undertaken, that they consent and this is documented in the patient records. Perform hand hygiene and apply disposable gloves and apron.  Ensure no antibiotics or other therapeutic drops have been used in the ear canal 3 hours before taking the swab.	To reduce the risk of contamination
2.	Seat the patient comfortably with head supported if necessary.	For patient comfort and to obtain a good position for specimen collection.
3.	Direct light source into the patient's ear.	To allow visual inspection of the site.
4.	Gently grasp the pinna of the ear and lift it upwards and backwards.	To straighten the external auditory meatus.
5.	Gently rotate the swab into the external auditory canal. <b>DO NOT</b> push beyond visual path. Place swab in transport medium	To avoid damage to tympanic membrane.
6.	Remove gloves and apron.	To reduce the risk of contamination
7.	Dispose of waste as per local policy and perform hand hygiene.	To ensure safe disposal of waste To reduce risk of contamination
8.	Complete the required patient details on the swab container and laboratory request form, ensuring clinical details of the infection are described and documented Also provide information regarding current or recently completed antibiotic therapy. Clinicians must use a specimen carrier when transporting from the patients home. Store sample in fridge if there will be a delay in dispatch to the laboratory.	To ensure prompt investigation.



## **Groin/Perineal Swab**

- Sterile specimen swab with bacterial medium
- Disposable gloves and apron
- Waste bag/receptacle
- Couch roll

Step	Action	Rationale
1.	Ensure that the individual is fully aware of the procedure to be undertaken, that they consent and this is documented in the patient records. Perform hand hygiene.	To reduce risk of cross-infection.
2.	Position patient, as appropriate and cover.	To allow access to groin/perineum whilst maintaining dignity.
3.	Decontaminate hands Put on gloves, apron and any other protective clothing as appropriate	To minimise the risk of cross infection.
4.	Rub the swab over the area with a rolling motion for 10-15 seconds.	To ensure sufficient sample is taken.
5.	Place swab with specimen directly into transport medium, breaking stick handle carefully if a viral swab is being taken.	Chlamydial and viral transport medium tubes are not large enough to accommodate the whole swab.
6.	Remove protective clothing.	To minimise the risk of cross infection.
7.	Dispose of waste as per local waste policy and perform hand hygiene.	To ensure safe disposal of waste To minimise the risk of cross infection.
8.	Clinicians must use a specimen carrier when transporting from the patients home. Send specimen to laboratory as soon as possible. If sample taken out of hours, refrigerate and send the following day.	Ensures prompt investigation.



## **Female Genital Tract Specimens**

The procedure for taking both high vaginal and endo-cervical swabs is the same.

**NB:** In order to examine for Chlamydia a Chlamydia collection kit is required and can be ordered from Pathology reception. Separate swabs into the correct medium are required for each of viral, Chlamydial or bacterial cultures.

- Sterile specimen swab
- Swabs with bacterial or viral transport medium or Chlamydia kit
- Disposable gloves and apron
- Waste bag /receptacle
- · Lubricating jelly, if required
- Sterile gauze
- Sterile vaginal speculum Cuscoe or Simms
- Additional light source
- Tissues
- Consider eye/mouth protection if purulent discharge or excess discharge is present

Step	Action	Rationale
1.	Ensure that the individual is fully aware of the procedure to be undertaken, that they consent and this is documented in the patient records. Perform hand hygiene. <b>N.B</b> The patient may prefer to self-screen if the swab is from the perineal region.	To reduce risk of cross-infection.
2.	Position patient, as appropriate and cover.	To allow access to the genital tract whilst maintaining dignity.
3.	Position additional light source.	To allow visual inspection of the genital tract.
4.	Decontaminate hands Put on gloves, apron and any other protective clothing as appropriate	To minimise the risk of cross infection from the patient's body fluids.
5.	If using a speculum for swabbing internal genitalia, lubricate with jelly.	To ensure ease of insertion and to ease patient discomfort.
6.	Insert speculum gently into the vagina and encourage the patient to concentrate on breathing deeply and slowly. Open speculum.	This will aid relaxation thus allowing for ease of insertion and reduce discomfort.



7.	Insert the specimen swab into the endocervical canal until the tip is no longer visible. Rotate 3-5 seconds. and then withdraw the swab avoiding any contact with vaginal surfaces.	To ensure sufficient sample is taken
8.	Place swab with specimen directly into transport medium, breaking stick handle carefully, if necessary to do so.	Chlamydial and viral transport medium tubes are not large enough to accommodate the whole swab.
9.	Remove protective clothing.	To minimise the risk of cross infection.
10.	Dispose of waste as per local waste policy and perform hand hygiene.	To ensure safe disposal of waste To minimise the risk of cross infection.
11	Clinicians must use a specimen carrier when transporting from the patients home. Send specimen to laboratory as soon as possible. If sample taken out of hours, refrigerate and send the following day.	Ensures prompt investigation.



## **Male Urethral Swab**

- Disposable gloves and apron
- Swab and bacterial transport medium
- Laboratory request form
- Waste bag/receptacle

Step	Action	Rationale
1.	Ensure that the individual is fully aware of the procedure to be undertaken, that they consent and this is documented in the patient records.  Perform hand hygiene and apply disposable gloves and apron. Patient may prefer to do this themselves.	To reduce the risk of cross infection.
2.	Retract foreskin, if present. Clean the meatus with sterile gauze and saline.	To facilitate accurate collection of specimen.
3.	Rotate swab gently in the urethral meatus for 3-5 seconds	To collect secretions.
4.	Place swab in transport medium.	To facilitate the collection of a viable sample
5.	Reposition foreskin.	To minimise the risk of paraphimosis.
6.	Remove gloves and apron.	To reduce the risk of cross infection.
7.	Dispose of waste as per local policy and repeat hand hygiene.	To ensure safe disposal of waste To reduce risk of contamination
8.	Ensure the swab and laboratory collection form are filled in correctly and send to the laboratory as soon as possible.	To facilitate laboratory identification of microorganisms To ensure prompt delivery to microbiology.
9.	Clinicians must use a specimen carrier when transporting from the patients home. Send specimen to laboratory as soon as possible. If sample taken out of hours, refrigerate and send the following day.	Ensures prompt investigation.



# **Skin Scrapings and Toe Nail Clippings**

- Disposable gloves and apron
- Sterile specimen container (universal container)
- Disposable sterile blade (skin scrapings) or sterile disposable scissors
- Laboratory request form
- Waste bag/receptacle

Step	Action	Rationale
1.	Ensure that the individual is fully aware of the procedure to be taken, that they consent and this is documented in the patient records.  Perform hand hygiene and apply disposable gloves and apron.	To reduce risk of cross infection.
2.	Collect scrapings/clippings and place in sterile container.	In accordance with Microbiology guidance
3.	Remove gloves and apron.	To reduce risk of contamination
4.	Dispose of waste as per local waste policy and perform hand hygiene.	To ensure safe disposal of waste and reduce the risk of contamination
5.	Clinicians must use a specimen carrier when transporting from the patients home. Send for immediate microscopy requesting <b>FUNGAL</b> culture.	To ensure correct investigation to be carried out.