



Community Infection Prevention and Control Guidance for General Practice

(also suitable for adoption by other healthcare providers,
e.g. Dental Practice, Podiatry)

Specimen collection

SPECIMEN COLLECTION

Version 1.00
December 2017

Please note that the internet version is the only version that is maintained. Any printed copies should, therefore, be viewed as 'uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

This guidance document has been adopted as a policy document by:

Organisation:

Signed: 

Job Title:

Date Adopted:

Review Date:

If your organisation would like to exclude or include any additional points to this document, please include below. Please note, the Community IPC Team cannot endorse or be held responsible for any addendums.

Community Infection Prevention and Control
Harrogate and District NHS Foundation Trust
Gibraltar House, Thurston Road
Northallerton, North Yorkshire. DL6 2NA
Tel: 01423 557340
email: ipccommunity@hdfnhs.uk
www.infectionpreventioncontrol.co.uk

Legal Disclaimer

This guidance produced by Harrogate and District NHS Foundation Trust is provided 'as is', without any representation endorsement made and without warranty of any kind whether express or implied, including but not limited to the implied warranties of satisfactory quality, fitness for a particular purpose, non-infringement, compatibility, security and accuracy.

These terms and conditions shall be governed by and construed in accordance with the laws of England and Wales. Any dispute arising under these terms and conditions shall be subject to the exclusive jurisdiction of the courts of England and Wales.

Contents

Page

| | |
|--|---|
| 1. Introduction..... | 4 |
| 2. Specimen containers and transport bags..... | 4 |
| 3. Specific information on microbiology specimen collection..... | 5 |
| 4. Storage..... | 6 |
| 5. Labelling..... | 7 |
| 6. Disposal of urine samples..... | 8 |
| 7. Spillages of specimens..... | 8 |
| 8. Transportation..... | 8 |
| 9. Infection Prevention and Control resources, education and training..... | 8 |
| 10. References..... | 9 |

SPECIMEN COLLECTION

SPECIMEN COLLECTION

1. Introduction

All specimens are a potential infection risk, therefore, all specimens must be collected using standard precautions. Specimens should be transported in a rigid container in accordance with the *Carriage of Dangerous Goods and Use of Transportable Pressure Equipment* (2009).

Taking routine specimens, with the exception of blood samples, should be avoided to help reduce inappropriate prescribing of antibiotic treatment. Specimens should only be taken if there are indications of a clinical infection.

Urine should not be dipsticked for nitrites and leukocytes unless there are clinical signs of a urinary tract infection, treating a positive dipstick for nitrites and leukocytes without clinical signs of an infection may result in inappropriate prescribing of antibiotics.

2. Specimen containers and transport bags

Wherever possible, reception staff should avoid handling specimens due to the risk of infection.

The person who obtains the specimen should ensure:

- The container is appropriate for the purpose. If there is leakage or an inappropriate container is used, the specimen should be rejected as it will not be processed by the laboratory due to the infection risk
- The lid is securely closed
- There is no external contamination of the outer container by the contents
- Specimens are placed inside the plastic transport bag attached to the request form after they have been labelled
- The transport bag should be sealed using the integral sealing strip (not stapled, etc.)
- For large specimens, e.g. 24 hour urine, specimens may be enclosed in individual clear plastic bags tied at the neck. The request form must not be placed in the bag, but securely tied to the neck of the bag
- Specimens received from patients should be placed in a rigid wipeable container. This should be cleaned on a regular basis with a disinfectant wipe

3. Specific information on microbiology specimen collection

| Sample | Key information |
|---|--|
| Ear swab | No antiseptic or antibiotic should have been installed in the ear prior to taking the swab |
| Eye swab | Moisten a swab stick in sterile saline. Hold the swab parallel to the cornea and gently rub the conjunctiva in the lower lid. If for Chlamydia testing, send in specific commercial chlamydia swabs |
| Faeces | Ask the patient to open their bowels into a receptacle (an ice cream or margarine container can be used if washed and dried or a carrier bag can be used positioned under the toilet seat). Scoop a sample of faeces into the specimen container using the container spoon provided. Request faecal parasites if history of foreign travel. NB: faecal specimens can be taken even if contaminated with urine. If the patient has had antibiotic treatment in the past 12 weeks, request <i>Clostridium difficile</i> testing |
| Nasal swabs | Moisten the swab in sterile water. Move the swab from the anterior nares (front of the nostril) and direct it upwards into the tip of the nose. One swab is sufficient for both nostrils |
| Penile swab | Retract foreskin. Rotate swab gently in the urethral meatus |
| Sputum | Sputum should be expectorated directly into a sterile container. Early morning specimens are the most useful |
| Throat swab | When collecting a throat swab, care should be taken to depress the tongue using a spatula, this avoids touching the buccal mucosa or tongue with the swab. Take the specimen from the posterior pharynx, tonsils, area with lesion or visible exudates. |
| Saliva | For the diagnosis of mumps, saliva swabs should be taken as per the instructions supplied in the sample kit which is obtainable from your local Public Health England Team |
| Urine: Catheter specimen of urine (CSU) | Clean the catheter sampling port with an alcohol swab. Use a sterile syringe to withdraw the specimen. Transfer the specimen into a red top urine specimen container with boric acid (boric crystals are in the bottom of the container) |

| Sample | Key information |
|---|---|
| Urine: Mid-stream sample of urine male | Retract the foreskin and clean the surrounding urethral meatus with soap and warm water. Ask the patient to urinate, passing the first part into the toilet, but to collect the middle part of the specimen into a sterile bowl. Pass the remainder into the toilet. Transfer the specimen into a red top urine specimen container with boric acid (boric crystals are in the bottom of the container) |
| Urine: Mid-stream sample of urine female | Clean the genitalia with soap and warm water, wiping from front to back. Ask the patient to urinate, passing the first part into the toilet, but to collect the middle part of the flow into a sterile bowl. Pass the remainder into the toilet. Transfer the specimen into a red top urine specimen container (which contains boric acid) |
| Vaginal/cervical swabs | High vaginal/cervical swabs should be collected using a vaginal speculum. Take care not to touch the lower vagina or perineum. Use a specific Chlamydia swab for Chlamydia specimens and note handling information |
| Wound swabs | A sample of aspirated pus is preferred to a swab. However, if there is not enough pus to provide a sample, take a swab of any pus or exudate present. If the swab is taken from an ulcer, clean away any debris with saline before taking the swab. Swabbing of dry crusted areas is unlikely to be helpful. When necessary to take a swab from a dry wound, moisten the swab with normal saline |

4. Storage

For the most accurate results, specimens should be dispatched to the laboratory as soon as possible or at least within 24 hours. After this time, any dominant or more virulent micro-organisms will flourish and weaker ones will die off, which can lead to inaccurate results.

| Specimen | Storage | Container | To laboratory |
|---------------|---|---|-------------------------------------|
| Wound swab | Wound swabs should reach the laboratory on the day that they are taken and stored at room temperature. Do not leave specimens over the weekend or bank holidays | Sterile cotton swab containing transport medium. Charcoal medium increases survival of bacteria during transportation | As soon as possible within 24 hours |
| Sputum | Store at room temperature | Plain universal container | As soon as possible within 24 hours |

| Specimen | Storage | Container | To laboratory |
|-------------------------------|---|---|-------------------------------------|
| Urine | Overnight only in a specimen fridge at 4°C | Universal container with boric acid (red top) | As soon as possible within 24 hours |
| Faeces | Specimen fridge at 4-8°C, but can be stored at room temperature | Stool specimen container | As soon as possible within 24 hours |
| Blood for routine examination | Send directly to laboratory | Specific bottles as supplied | Direct to laboratory |

5. Labelling

Specimens must be labelled correctly to prevent misdiagnosis and wastage. The specimen request form and the specimen container label must be completely filled in. If using patient identification labels on forms, ensure that the copy section also has a label.

All specimens must be clearly labelled with the correct patient details which include:

- Patient's full name
- Patient's address
- Male or female
- Patient's date of birth and NHS number
- Type of specimen, e.g. catheter or mid-stream urine sample
- Relevant clinical details, e.g. pyrexia, increased confusion, description of the wound
- Date and time of sample collection
- GP details
- Signature (unless electronic form)
- GP Practice details for destination of the report
- Relevant medication history, e.g. antibiotic history, symptoms and their duration, foreign travel
- Hazardous groups 3 and 4 organisms, i.e. blood-borne viruses, TB, must have a 'Danger of Infection' label applied to both the container and request form
- Wherever possible, obtain a fresh specimen and take the specimen at a time when it can be transported to the laboratory in a timely manner
- Specimens being stored overnight must be placed in a designated specimen refrigerator

6. Disposal of urine samples

Specimens of urine not submitted to the laboratory for further investigation can be disposed of in the following way:

- Secure the lid of the urine specimen container and place into an infectious waste bag. Solidifying crystals can be added to the container to solidify the urine to prevent accidental spillage. Check with your local waste contractor to see if they accept liquid waste
- Alternatively, empty the urine into a toilet, appropriate PPE should be worn including eye protection to protect against splashes. The container should then be disposed of as infectious waste

Do not contaminate handwash basins or sinks by disposing of urine samples in them.

7. Spillages of specimens

- Spillages of blood or body fluids should be dealt with immediately and in accordance with standard precautions.
- Should the container leak, a new specimen should be obtained. If this is not possible, decant the specimen into a clean container.
- If the outside of the container is contaminated, it should be disinfected with an appropriate wipe. If the specimen form is contaminated, a new form should be used.

8. Transportation

Specimens should be transported to the laboratory in a secure rigid container with a biohazard label.

9. Infection Prevention and Control resources, education and training

The Community Infection Prevention and Control (IPC) Team have produced a wide range of innovative educational and IPC resources designed to assist your Practice in achieving compliance with the *Health and Social Care Act 2008* and CQC registration requirements.

These resources are either free to download from the website or available at a minimal cost covering administration and printing:

- Over 20 IPC Guidance documents (Policies) for General Practice
- 'Preventing Infection Workbook for General Practice'
- 'IPC CQC Inspection Preparation Pack for General Practice'
- IPC audit tools, posters, leaflets and factsheets
- 'IPC Advice Bulletin for GP Practice Staff'

In addition, we hold educational study events in North Yorkshire and can arrange bespoke training packages and 'Mock IPC CQC Inspections'. Prices vary depending on your requirements and location.

Further information on these high quality evidence-based resources is available at www.infectionpreventioncontrol.co.uk.

10. References

Department of Health (2007) *Transport of Infectious Substances – Best Practice Guidance for Microbiology Laboratories*

Health and Safety (2009) *Carriage of Dangerous Goods and Use of Transportable Pressure Equipment*

Royal Marsden NHS Foundation Trust (2015) *The Royal Marsden Hospital Manual of Clinical Nursing Procedures (Ninth Edition)*