

**APPENDIX 9**

**URINE SAMPLING – CATHETER SPECIMEN OF URINE – See page 44**

**Equipment**

- Dependent upon technique either sterile or non sterile gloves
- Apron
- Monovette
- Non-traumatic clamps
- Appropriate documentation/forms
- 70% alcohol with 2% chlorhexidine ( hard surface disinfection wipe)

**Pre-Procedure**

No	Action	Rationale
1	Explain and discuss the procedure with the patient.	To ensure the patient understands the procedure and gives valid consent (NMC 2012).
2	Ensure a suitable, private location.	To maintain patient privacy and dignity (Gilbert 2006).
3	Prepare equipment and place on sterile trolley.	To prepare equipment for use.

**Procedure**

No	Action	Rationale
4	<i>If no urine visible in catheter tubing:</i> wash/decontaminate physically clean hands with alcohol rub, don apron and apply non-sterile gloves prior to manipulating the catheter tubing.	To minimize the risk of cross-infection (Pellowe 2009; RCN 2012).
5	Apply non-traumatic clamp a few centimetres distal to the sampling port.	To ensure sufficient sample has collected to allow for accurate sampling (Higgins 2013).
6	Cleanse hands; either cleanse hands or cleanse visibly clean hands with alcohol hand gel and single use disposable plastic apron and gloves.	To prevent cross-contamination (Fraise and Bradley 2009; RCN 2012).
7	Wipe sampling port with 2% chlorhexidine in 70% isopropyl alcohol and allow drying for 30 seconds.	To decontaminate sampling port and prevent false-positive results (DH 2007a).
8	<i>If using needle and syringe:</i> using a sterile syringe and needle, insert needle into port at an angle of 45° and aspirate the required amount of urine, then withdraw needle. <i>Or in a needle-less system:</i> insert syringe firmly into centre sampling port (according to manufacturer's guidelines), aspirate the required amount of urine and remove syringe.	To enable safe inoculation of urine specimen and to minimize the risk of penetration of the wall of the catheter tubing (2006). Reduces the risk of sharps injury (DH 2006; European Biosafety Network 2010).

9	Transfer an adequate volume of the urine specimen (approx. 10 mL) into a sterile container immediately.	To avoid contamination and to allow for accurate microbiological processing (HPA 2014j).
No	Action	Rationale
10	Discard needle/syringe into sharps bin.	To prevent the risk of needlestick injury.
11	Wipe the sampling port with an alcohol wipe and allow to dry.	To reduce contamination of access port and to reduce risk of cross-infection (DH 2007a).

**Post Procedure**

No	Action	Rationale
12	Unclamp catheter tubing.	To allow drainage to continue.
13	Dispose of waste, remove apron and gloves and cleanse hands.	To ensure correct clinical waste management and reduce risk of cross-infection (DH 2006a)
14	Label sample, complete microbiological request form including relevant clinical information, such as signs and symptoms of infection, antibiotic therapy.	To maintain accurate records and provide accurate information for laboratory analysis (NMC 2010; Weston 2008).
15	Dispatch sample to laboratory immediately (within 4 hours) or refrigerate at 4°C.	To ensure the best possible conditions for microbiological analysis and to prevent micro-organism proliferation (HPA 2014j).
16	Document the procedure (including urinary catheter passport).	To ensure accurate record keeping (NMC 2010)

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Pellowe, C. (2009) Using evidence-based guidelines to reduce catheter related urinary tract infections in England. *Journal of Infection Prevention*, 10(2), 44–49. [Cross Ref link](#)

RCN (2012) *Wipe It Out: Essential Practice for Infection Prevention and Control: Guidance for Nursing Staff*. London: Royal College of Nursing.

Royal Marsden Hospital Manual of Clinical Nursing Procedures (2015) Ninth Edition, (Online). (Accessed March 2018) Weston, D. (2008) Infection Prevention and Control: Theory and Clinical Practice for Healthcare Professionals. Oxford: John Wiley & Sons. [Cross Ref link](#)

**Pre-Procedure for Urine Sampling with a Monovette**

No	Action	Rationale
1	Explain and discuss the procedure with the patient.	To ensure the patient understands the procedure and gives valid consent.
2	Ensure a suitable, private location.	To maintain patient privacy and dignity.
3	Prepare equipment and place on disposable tray.	To prepare equipment for use.
4	Cleanse hands, don single use disposable plastic apron and gloves.	To prevent cross-contamination.

**Urine-Monovette Procedure for Obtaining a CSU:**

- 1) If necessary, clamp the tubing a few centimetres distal to the sampling site. The sampling segment must be filled with urine.
- 2) Disinfect the sampling site on the catheter according to institutional guidelines.
- 3a) Remove the stopper of the Urine-Monovette® and keep for later use.
- 3b) Pierce the centre of the membrane at the sampling site with the Luer tip of the sterile Urine-Monovette®.
- 4) Fill the Urine-Monovette® with urine by completely withdrawing the plunger.
- 5) Break off the plunger and throw away. Replace the stopper.
- 6) If using the Urine-Monovette® with boric acid, mix well after sample collection (tilt approximately 5 times).

**Follow post procedure for specimen collection actions 13, 14 and 16.**