

URINE CULTURE & SENSITIVITY (C&S) SAMPLE COLLECTION MARCH 2018

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The **OFFICIAL** version is available on the InsideNet.

1.0 GUIDELINE

- 1.1 Interior Health is committed to reducing the number of false positive urine cultures and/or 'contaminated' samples that can result in inappropriate antibiotic use, need for recollection, inconvenience / discomfort for the patient and possible delay in treating a UTI.

Typical Signs of a Urinary Tract Infection (UTI) include, but are not limited to:

- Dysuria- pain or burning on urination
- Urgency
- Increased frequency of urination
- Costovertebral tenderness or pain
- Suprapubic tenderness

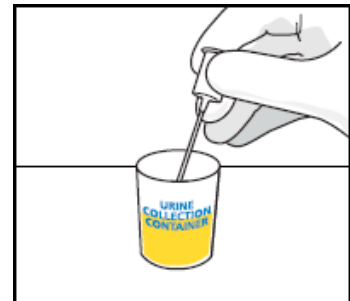
If the patient doesn't have or can't report that they have any of the above typical symptoms, use clinical judgement to determine whether or not to send samples. Foul smelling, cloudy, or dark urine *alone* are not indications to send a urine sample for culture as this may represent dehydration. It is not recommended to obtain a urine sample for C&S from an indwelling catheter as these catheters rapidly become colonized with bacteria (with 100% of catheters colonized within one month).

1.2 **Collection Procedure**

1. *Gather supplies.* Pink top sterile container, C&S Transfer Straw kit with boric acid tube, Patient label.
2. *Identify Patient.* Identify patient by asking Name and DOB. Check that the information (Name, DOB, PHN) on the collection label matches the armband (inpatient) or Care Card (outpatient).
3. Obtain a clean voided urine specimen or urine from a **newly inserted** urinary catheter using aseptic technique. Refer to [Clinical Skills](#) for collection practices.
4. Place sample into a sterile pink top specimen container.
 - Transfer urine immediately after collection to the gray top boric acid tube (see steps 5-9 below), ideally within 20 minutes. Maintain PPE & aseptic technique following appropriate protocols. If volume is less than 5mL, refer to 1.3.

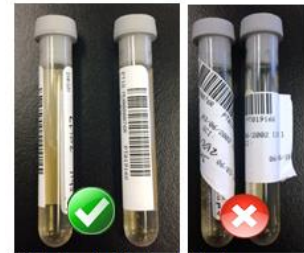
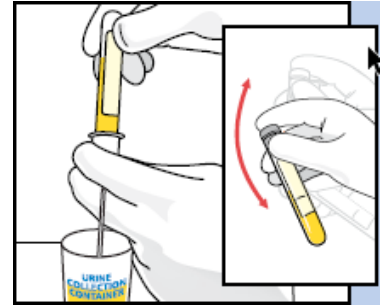
Note: C&S sample must be obtained first as to not contaminate the sample.

- Use a boric acid tube to preserve all urine culture orders. This includes 'culture if indicated' orders.
 - Do not 'dip' for routine urinalysis testing prior to collecting C&S sample.
 - Do not collect other samples from the sterile container prior to C&S.
5. Open kit along perforated line. Do not contaminate the straw end by touching it or placing it on a surface. To submerge tip of transfer straw into the urine carefully grasp the large plastic end and place into the urine container. Ensure the urine container is on a stable surface to avoid spills.
 - Container may be tipped at an angle if volume is limited. If tipped, hold securely to prevent spills.
 6. While securely holding the straw, invert tube and push gray top into the transfer straw, piercing top of tube. Ensure straw end remains submerged and does not lift out of the urine. Do not allow air to enter the straw.



Guideline

- Hold tube in place until it stops filling, (3-4mL). Do not allow air to enter the tube.
 - Remove tube from the straw by pulling gently.
 - **Mix tube by inverting 8-10 times**, ensuring the preservative is fully dissolved.
 - If another tube is to be filled, leave transfer straw in container and repeat
7. Remove straw from container and **dispose of straw into a sharps container**.
- The transfer straw contains a needle inside so must be discarded in biohazard container approved for sharps disposal.
8. Label the tube in the presence of the patient.
- When labelling, cover manufacturer label to leave urine contents visible
 - Record your mnemonic and date/time of collection on tube
 - Check that sample is at the minimum fill line on the tube. Over or under-filled tubes will not be processed.
9. Place sample in biohazard bag.
- Transport to lab as soon as possible.
10. If other urine testing is required, send urine in appropriate container. Remaining urine can be poured down the toilet and the container discarded.



*Label vertically, do not 'flag' or place label diagonally

- 1.3 A minimum of 5mL of urine is required in the container in order to aspirate 3-4 mL into the preservative tube. If less than 5mL is collected, send entire container to lab within 2 hours. **Sample must be refrigerated.**

The top of the ridged line area is 5mL. If the sample is below this area, there will not be enough to aspirate into the gray top tube.

Note: In low volume samples **do not use a syringe** to transfer urine into the boric acid tube. Use of a syringe increases risk of needle stick injury, splatter and potential exposure due to forced pressure and may also cause over or under filling of the tubes.

Do not remove the gray top and attempt to fill manually. Removal of the gray top may cause sample contamination and invalid results.



- 1.4 Urine collected in boric acid tubes cannot be used for other testing.

Urine Culture (UC)



Boric Acid Tube

Routine Urinalysis (RU) Urine Chemistry



Pink Top Sterile Container

- 1.5 C&S urine samples must be transferred to boric acid tubes as soon as possible (maximum 2 hours) and received in the laboratory in less than 48 hours.



2.0 REFERENCES

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3.0 DEVELOPED BY [March 2018]

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