

## Collection of urine sample from a nephrostomy tube

1. Inform patient of the reason for collecting urine sample and need to avoid body movement during the procedure.
2. Provide privacy.
3. Perform five moments of hand hygiene.
4. Gather equipment: sterile urine sample jar, specimen bag, chlorhexidine aqueous 0.1% antiseptic solution or two large alcohol wipes, basic dressing pack or sterile towel and gauze swabs, sterile gloves, securement device or adhesive dressing, waterproof underpad, plastic bag.
5. Arrange patient's position and clothing to expose nephrostomy tube and its exit site. May need to gently remove existing adhesive dressing to allow access. Take care not to pull on the nephrostomy tube. If necessary, put an adhesive tape to secure the tubing of the collecting bag.<sup>1</sup>
6. Place a waterproof underpad to prevent soiling of bed linen and clothing.
7. Perform hand hygiene.
8. Don personal protective equipment and sterile gloves.
9. Place sterile dressing towel under or next to the nephrostomy tube.
10. Clean nephrostomy tube and collecting bag junction with antiseptics, such as alcohol or chlorhexidine swabs.<sup>1</sup>
11. Using sterile technique, detach nephrostomy tube from its existing collecting bag.
12. Place a sterile specimen jar immediately at the tip of the nephrostomy tube and allow gravity to provide fresh urine. Urine usually drips out slowly.<sup>1</sup>
13. Collect about 10mL of fresh urine, close specimen jar firmly and place in specimen bag.
14. After collecting the urine, attach the nephrostomy tube to a new sterile urine drainage bag.
15. Anchor the nephrostomy tube and drainage tubing to prevent dislodgement.<sup>1</sup>
16. Label specimen with patient identification and sample collection time and date.
17. Send specimen in specimen bag with completed laboratory service request form to laboratory for testing immediately. If sample pick up is delayed, store urine specimen in fridge at 4-10°C.

### Alert!

Do not collect a sample from previous urine already in the existing collecting bag to avoid contaminants.

### References

1. Yoo M, Bridwell R, Inman B, et al. Approach to nephrostomy tubes in the emergency department. *Am J Emerg Med.* 2021;50:593-6. DOI: 10.1016/j.ajem.2021.09.034

**Acknowledgement:** This resource was developed by Karina So, Urology Nurse Practitioner (private practice), Clinical Lecturer (Concord Medical School), University of Sydney.