

Scrub the Hub!

Which hubs have to be scrubbed? Every port on the system, injection ports into bags or bottles, injection ports on administration sets, needless connectors, and the hub of a catheter itself are potential portals of entry for infection. Closed catheter access systems are preferred as they are associated with fewer central line–associated bloodstream infections (CLABSIs) than open systems. Stopcocks and injection ports should be capped when not being used.

SCRUB THE HUB YOU ARE ACCESSING EVERY TIME YOU ACCESS IT!

If you continue to have a high rate of infections, consider using alcohol-impregnated port protectors, scrubbing devices, and needless neutral displacement connectors in addition to scrubbing the hub.

How do you scrub the hub? Adequately scrubbing the hub depends on the agent you use, appropriate contact and drying time, and—most important—friction.

To Scrub the Hub

1. Perform hand hygiene.
2. Don clean or sterile gloves.
3. Use a scrubbing device with an alcohol product such as chlorhexidine with alcohol or 70% alcohol to disinfect catheter hub and stopcocks. If you are using a pad, make sure you don't contaminate it before use and use only on one hub. Prep pads should NEVER be reused.
4. Rub for 10 to 15 seconds (unless directed otherwise by the manufacturer's instructions), generating friction by scrubbing in a twisting motion as if you were juicing an orange. Make sure you scrub the top of the hub well, not just the sides.
5. Allow the hub to dry. Prevent it from touching anything while drying.
6. Access the stopcock or injection port only with sterile devices.
7. Infuse medication or draw blood.
8. Discard gloves and perform hand hygiene.

Sources:

Ryder M., et al. Differences in bacterial transfer and fluid path colonization through needlefree connector-catheter systems in vitro. Paper presented at Society for Healthcare Epidemiology of America meeting, Dallas, Apr 29, 2011.

Sweet MA, et al. Impact of alcohol-impregnated port protectors and needless neutral pressure connectors on central line–associated bloodstream infections and contamination of blood cultures in an inpatient oncology unit. *Am J Infect Control*. 2012 Dec;40(10):931–934. doi: 10.1016/j.ajic.2012.01.025. Epub 2012 May 9.