

## Preparing the Vascular Access for Cannulation

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When our patients come to the dialysis unit, they wash their access arm to decrease the amount of staph on their skin to reduce the chances of getting an access infection. Once the access has been washed, it is ready to be cleansed by the patient care staff to further reduce the amount of staph on the patient's skin. Today, there are more antimicrobial cleansing options for vascular access than we have had in the past. Each one of these antimicrobials requires different length of application, as well as length of time to be effective. Let's review the proper application for each of these antimicrobials.

Three of the top four antimicrobials need to be dry to be effective, but they have different contact times. These include povidone iodine (Betadine®), sodium hypochlorite (ExSept® Plus), and chlorhexidine (ChloraPrep®). The fourth cleansing preparation is alcohol, which has a very short-acting window of effectiveness. Each site has to be individually prepped – clean the arterial site for 60 seconds then immediately insert the needle, then clean the venous site for 60 seconds and immediately insert the needle.

The table below indicates the proper use of these cleansing agents:

Cleansing Agent	Contact Time	Effective State
Betadine®	3 minutes	dry
ExSept® Plus	2 minutes	dry
ChloraPrep®	30 seconds	dry
alcohol	60 seconds each site	immediately after cleaning

One of the important things to remember when cleansing a site is not to wipe off the cleansing agent in order to speed up the cannulation process because it is possible that the sites could become contaminated. **Never** touch the sites once the cleansing agent has been applied – the next thing that should touch the access sites should be the sterile needles.

Cannulation is an invasive procedure and properly preparing the access sites can eliminate the possibility of contamination and/or access infection. Review your facility's policies and procedures, update them if necessary and, most importantly, follow them.

### References:

<http://www.betadine.com/pdf/Product%20Information%20Sheets.pdf>

[http://www.alcavis.com/products/exsept\\_plus\\_procedures.html](http://www.alcavis.com/products/exsept_plus_procedures.html)

[http://www.enturia.com/products/chloraPrep/pdf/In\\_Service/3\\_clear\\_inservice.pdf](http://www.enturia.com/products/chloraPrep/pdf/In_Service/3_clear_inservice.pdf)

<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5116a1.htm>