

Renal Services (Hemodialysis)

Guide to Conduct Hand Hygiene Reviews



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If you have questions about this guide or about hand hygiene reviews in general, you can email hand.hygiene@ahs.ca or contact your zone [Project Manager](#).



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Hemodialysis is a procedure that replaces some functions of the kidney such as removing fluid and waste products. Dialysis start times are usually scheduled and reviewers should check with department staff to confirm start times for patients. The dialysis procedure takes approximately four hours to complete for each patient. During this time, the nurse will move between multiple patients. Nurses may chart, hand out medication, and provide care to other patients unit wide (i.e. troubleshooting, comfort measures, nutritional needs etc.) and set-up supplies at each station for discontinuing dialysis during the four hour period.

Before performing hand hygiene reviews in hemodialysis, reviewers are encouraged to complete an orientation to the hemodialysis department with a qualified hand hygiene reviewer. Orientation should provide a comprehensive overview of the patient environment and the healthcare environment within the hemodialysis setting.

Before conducting hand hygiene reviews in hemodialysis, there is information that reviewers must understand:

- The machine, patient's chart cover and the furniture in the hemodialysis station have been cleaned and low level disinfected with a healthcare approved cleaner/disinfectant. Once the cleaning and disinfection have been completed, the area remains vacant until the next patient arrives. During this period, the touch surfaces of the machine remain untouched and therefore clean.
- During the initiation of a run, the nurse often needs to move rapidly between the patient, and the controls on the machine. During this process the machine, patient and the patient's chart are considered patient environment. It is not necessary for the nurse to un-glove and perform hand hygiene during this short phase of treatment unless gross soiling occurs or there is a need to uncover and directly manipulate/touch the access site or central line (aseptic procedure).

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- Gloves are ‘task specific’ and must be removed as soon as the task for which they were donned is completed. Gloves must never be worn when accessing clean supplies from a common source. The only times gloves used during patient care may be worn outside of the patient station is when transporting soiled items to the soiled holding area/room.
- The nurse will access the patient’s bloodstream for the dialysis procedure by central venous catheter (CVC), fistula or graft. The CVC is a series of tubes that exits the patient’s upper chest. The fistula or graft may be located on the patient’s inner forearm or upper arm. Occasionally you may see accesses originating from the lower limbs usually on patients who have been on dialysis for a long time.



Often the nurse needs to move rapidly between the patient, and the controls on the machine. During this process the machine, patient and the patient’s chart are considered patient environment.

During the dialysis procedure, there are several opportunities for reviewers to observe the 4 Moments for Hand Hygiene. The following are some examples that reviewers may observe; the list is not intended to be all inclusive:

Moment 1 (BEF-PAT/ENV)

- if the healthcare provider has physical contact with the patient during admission and helping the patient settle into the station
- if the healthcare provider has direct contact with the patient or patient’s environment when the patient is being weighed
- before taking vital signs (blood pressure, temperature, etc.)
- before any contact the healthcare provider has with the dialysis station or the patient
- before setting-up the dialysis machine
- when the healthcare provider leaves the station to retrieve supplies, even if supplies are nearby, the healthcare provider must perform hand hygiene before re-entering the area

Moment 2 (BEF-ASP)

- before donning PPE, including gloves
- before accessing the patient’s fistula, CVC, or graft site
- before gloving to initiate or to discontinue a run
- before accessing clean supplies/linens
- before needling the access site
- before removing dressings to visualize or manipulate an access site
- before gloving for a dressing change or wound treatment

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- before preparation or administration of intramuscular or intravenous medications
- before food handling or feeding a patient

Moment 3 (AFT-BFL)

- after removing dressings
- after performing wound care
- after terminating hemodialysis
- after handling or disposing of contaminated tubing and dialyzer
- after emptying a bedpan or urinal

Moment 4 (AFT-PAT/ENV)

These examples only apply if they are the last point of contact with the patient/patient environment.

- moving away from the bedside to retrieve supplies (even if only a few steps away)
- moving in-between patients, such as when doing 30 minute checks during a run session
- after performing service or cleaning on the machines

Observation Point: when the healthcare provider moves between stations without leaving the area to go do any other task or touch any other objects, Moment 1 (BEF-PAT/ENV) and Moment 4 (AFT-PAT/ENV) are combined (see Section 3.4 Combined Moments).

Initiating Dialysis

The patient moves from the waiting room to the treatment space/area, is weighed and goes to the dialysis station where the nurse will coach the patient, do vital signs such as blood pressure, pulse, temperature and others measures using equipment involving patient contact and then enters dialysis machine settings.

The nurse will:

- “Access” the patient’s bloodstream for the dialysis procedure: before accessing the bloodstream the nurse performs hand hygiene, don’s procedure mask, eye protector, and gloves.
- Disinfect the skin or catheter at the access point.
- Insert a needle (with tubing), allow the tubing to fill with blood and clamp the line.
- Take blood samples (if required).
- Attach the tubing to the dialysis machine and start the machine.
- Removes gloves and performs hand hygiene. Dons new gloves. Clean/disinfect the machines

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touch surfaces (note if screen/controls have not been touched with gloved hands during the initiation process then cleaning the screen may not be necessary).

- Documents procedure - charting should only be done after the nurse doffs gloves and performs hand hygiene.
- If the patient has a CVC, there may be a transparent dressing. The nurse may just view the site in which case she can continue the dialysis process with the patient without changing gloves.
- If the patient has a dressing that requires changing, the nurse needs to remove gloves and clean hands after removing the old dressing. The nurse should don new gloves before proceeding with the dressing change; Moment 3 (AFT-BFL) and Moment 2 (BEF-ASP) are combined moments.

Discontinuing the Procedure

The nurse performs hand hygiene, dons a mask, eye protector, and gloves. The nurse will:

- Attach the tubing to a bag of solution that rinses the blood from the tubing back to the patient
- Disconnect the tubing from the patient and complete a flushing procedure for the patient's lines.
- Take patient's final blood pressure.
- Remove gloves and perform hand hygiene.
- Complete documentation.
- Will continue to check the site for any bleeding and provide final care to the patient. Depending on the patient care required, the nurse may have additional hand hygiene moments.

Setting-up for the Next Patient

The assigned person (e.g. service attendant) performs hand hygiene and dons mask, eye protector, and gloves and:

- clean supplies and sets-up the space for the next patient
- removes the tubing attached to the hemodialysis machine
- cleans the dialysis station
- performs hand hygiene
- accesses

Preparing the Hemodialysis Area for Next Run

If the healthcare provider is cleaning multiple **vacated** patient spaces as a continuous task in a hemodialysis unit, (i.e. retrieving dirty linen from all spaces) only one Moment 4 (AFT-PAT/ENV) will apply. Moment 2 (BEF-ASP) will be recorded when accessing gloves for cleaning.

Hand hygiene must be performed when moving from a dirty procedure to a clean procedure for example a Moment 2 (BEF-ASP) will be recorded when healthcare provider accesses clean linen or supplies to prepare the space for the next group of patient.

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