



Indiana
Department
of
Health

Dialysis Infection Prevention

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OUR MISSION:

**To promote, protect, and improve
the health and safety of all Hoosiers.**

OUR VISION:

**Every Hoosier reaches optimal health
regardless of where they live, learn,
work, or play.**



Objectives

- Describe importance of hand hygiene and PPE for both staff and patients
- Identify needs for increased precautions
- Describe prevention of cross-contamination in the environment
- Describe infection risks for fistulas, grafts and catheters
- Describe cleaning and disinfecting dialysis station
- Describe safe injection and preparation of medications

Introduction to Infection Prevention in Dialysis

- Patients who undergo dialysis treatment have an increased risk for infections.
- Hemodialysis patients are at a high risk for infection because the process of hemodialysis requires frequent use of catheters or insertion of needles to access the bloodstream.
- Hemodialysis patients have weakened immune systems, which increases their risk for infection, and they may require frequent hospitalizations and surgery where they might acquire an infection.

Hemodialysis is a patient's lifeline.

Our role as infection preventionist:

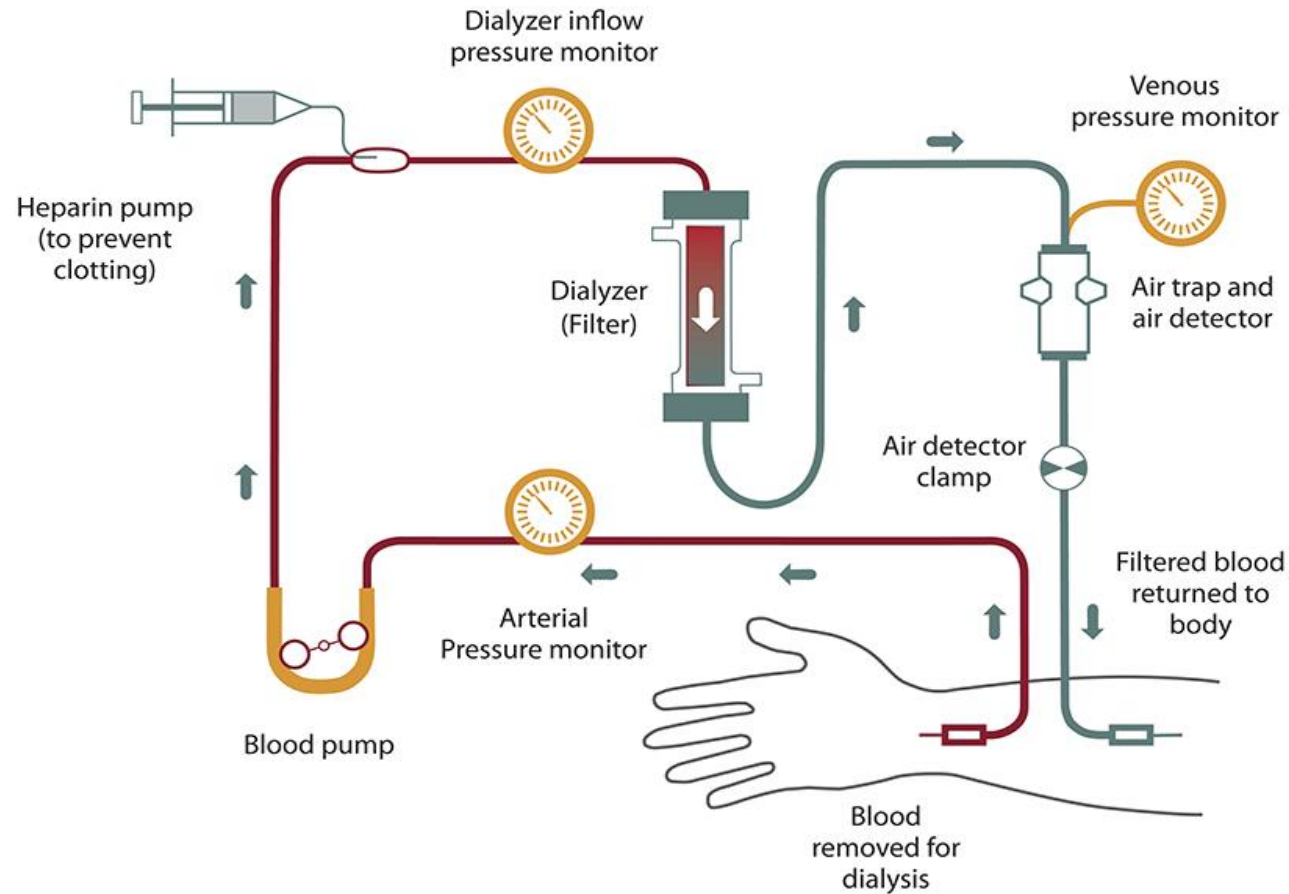
- Identify gaps in infection controls
- Decrease possible infection
- Ensure patient safety
- Administer vaccinations of staff and patients

National Burden of Dialysis Infections: A Cause for Concern

- In the U.S., there are about 370,000 people relying on hemodialysis (HD).
- About 75,000 people receive hemodialysis through a central line.
- Among patients being treated with HD, 98% used in-center HD and 2% used home HD.
- Central lines have a higher risk of infection than a fistula or graft.
- CDC estimates 37,000 central line-associated bloodstream infections may have occurred in U.S. hemodialysis patients in 2008.

APIC Implementation Guides Infection Prevention and Control in Dialysis Settings.
https://apic.org/wpcontent/uploads/2022/04/Dialysis_ImplementGuide3.pdf.

Hemodialysis



<https://www.niddk.nih.gov/health-information/kidney-disease/kidney-failure/hemodialysis>

Checklist and Audit Tools



The audit tools and checklists below are intended to promote CDC-recommended practices for infection prevention in hemodialysis facilities.



The audit tools and checklists can be used by individuals when assessing staff practices.



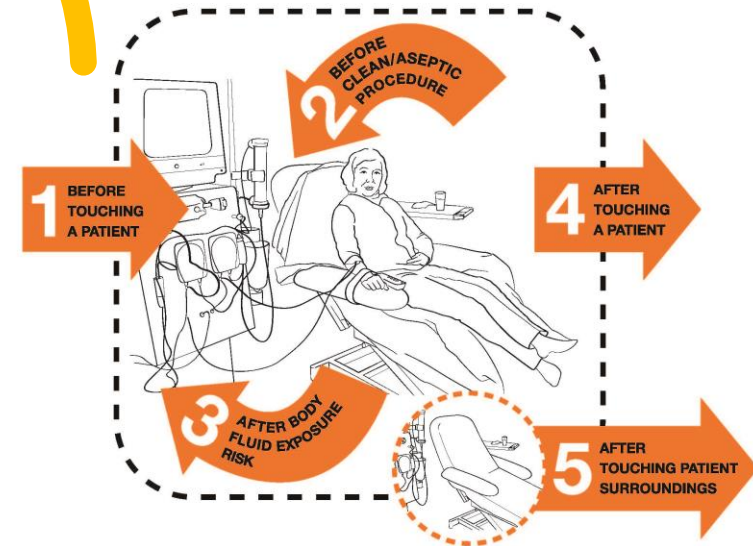
They can also be used by facility staff themselves to help guide their practices.

5 Moments for Hand Hygiene

- Hands are the main pathways of germ transmission during healthcare.
- Hand hygiene is therefore the most important measure to avoid the transmission of harmful germs and prevent healthcare-associated infections.

Your 5 Moments for Hand Hygiene

Haemodialysis in ambulatory care



1	BEFORE TOUCHING A PATIENT	WHEN? Clean your hands before touching a patient. WHY? To protect the patient against harmful germs carried on your hands.
2	BEFORE CLEAN/ ASEPTIC PROCEDURE	WHEN? Clean your hands immediately before performing a clean/aseptic procedure. WHY? To protect the patient against harmful germs, including the patient's own, from entering his/her body.
3	AFTER BODY FLUID EXPOSURE RISK	WHEN? Clean your hands immediately after a procedure involving exposure risk to body fluids (and after glove removal). WHY? To protect yourself and the environment from harmful patient germs.
4	AFTER TOUCHING A PATIENT	WHEN? Clean your hands after touching the patient at the end of the encounter or when the encounter is interrupted. WHY? To protect yourself and the environment from harmful patient germs.
5	AFTER TOUCHING PATIENT SURROUNDINGS	WHEN? Clean your hands after touching any object or furniture in the patient surroundings when a specific zone is temporarily and exclusively dedicated to a patient - even if the patient has not been touched. WHY? To protect yourself and the environment from harmful patient germs.

Hand Hygiene Steps

- When entering or leaving the treatment floor
- After removing gloves
- Before and after direct patient contact
- After completing tasks at one patient station before moving to another station
- Before procedures, such as administering intravenous medications
- Before and after contact with vascular access
- Before and after dressing changes
- After contact with items/surfaces at patient stations

Dialysis Audit Tool: Hand Hygiene

Guide to Hand Hygiene Opportunities in Hemodialysis

Hand hygiene opportunity category	Specific examples
1. Prior to touching a patient	<ul style="list-style-type: none"> Prior to entering station to provide care to patient Prior to contact with vascular access site Prior to adjusting or removing cannulation needles
2. Prior to aseptic procedures	<ul style="list-style-type: none"> Prior to cannulation or accessing catheter Prior to performing catheter site care Prior to parenteral medication preparation Prior to administering IV medications or infusions
3. After body fluid exposure risk	<ul style="list-style-type: none"> After exposure to any blood or body fluids After contact with other contaminated fluids (e.g., spent dialysate) After handling used dialyzers, blood tubing, or prime buckets After performing wound care or dressing changes
4. After touching a patient	<ul style="list-style-type: none"> When leaving station after performing patient care After removing gloves
5. After touching patient surroundings	<ul style="list-style-type: none"> After touching dialysis machine After touching other items within dialysis station After using chairside computers for charting When leaving station After removing gloves

Please make note of the following during this session.

	Yes	No	Comments
There is a sufficient supply of alcohol-based hand sanitizer			
There is a sufficient supply of soap at handwashing stations			
There is a sufficient supply of paper towels at handwashing stations			
There is visible and easy access to hand washing sinks or hand sanitizer			



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Division of Healthcare Quality Promotion



CDC Dialysis Collaborative Facility Name: _____ Date: _____ Start time: _____ AM / PM
Day: M W F Tu Th Sa Shift: 1st 2nd 3rd 4th Observer: _____ Location within unit: _____

Audit Tool: Hemodialysis hand hygiene observations

(Use a "✓" for each 'hand hygiene opportunity' observed. Under 'opportunity successful', use a "✓" if successful, and leave blank if not successful)

Discipline	Hand hygiene		Describe any missed attempts (e.g., during medication prep, between patients, after contamination with blood, etc.):
	Hand hygiene opportunity	Opportunity successful	

Discipline: **P**=physician, **N**=nurse, **T**=technician, **S**=student, **D**=dietitian, **W**=social worker, **O**=other
Duration of observation period = _____ minutes Number of successful hand hygiene opportunities observed = _____
Total number of patients observed during audit = _____ Total number of hand hygiene opportunities observed during audit = _____

** See hand hygiene opportunities on back page



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Personal Protective Equipment (PPE)

- Proper PPE should always be worn by **staff** to avoid exposure to potentially infectious blood and body fluids when connecting or disconnecting catheters.
- A mask should always be worn by **patients** during catheter access/care and a glove when holding pressure to access sites.



Isolation Room

- Dialyze hepatitis B (HBsAg+) patients in a separate room using separate machines, equipment, instruments and supplies.
- Be sure to use a separate gown when treating these patients.
- Staff members caring for patients with hepatitis B (HBsAg+) should not care for HBV-susceptible patients at the same time (e.g., during the same shift or during patient changeover):
 - Routine serologic testing for hepatitis B virus and hepatitis C virus infections
 - Vaccination of susceptible patients against hepatitis B
 - Isolation of patients who test positive for hepatitis B surface antigen
- **HBsAg+ means hepatitis B surface antigen (a lab test for hepatitis B virus) was positive.*
- **HBV-susceptible means anyone who has never been infected and lacks immunity to hepatitis B virus.*



Cleaning and Disinfecting the Dialysis Station

- **Cleaning** and **disinfection** reduce the risk of spreading an infection.
- **Cleaning** is done using cleaning detergent, water and friction and is intended to remove blood, body fluids and other contaminants from objects and surfaces.
- **Disinfection** is a process that kills many or all remaining infection-causing germs on clean objects and surfaces:
 - Use an EPA hospital-grade disinfectant.
 - Follow label instructions for proper dilution (follow manufacturer guidelines).
- **Wear gloves** during the cleaning/disinfection process.

*Refer to facility policy/procedure for disinfecting treatment area.

Cleaning and Disinfecting the Dialysis Station (cont.)

- All equipment and surfaces are considered contaminated after a dialysis session and must be disinfected or discarded, including tape.
- After the patient leaves the station, **disinfect** the dialysis station including machine, tray and chair (working from clean to dirty).
- Wipe **all** surfaces.
- Surfaces should be wet with disinfectant and allowed to air dry.
- Give special attention to cleaning control panels on the dialysis machines and other commonly touched surfaces.
- Empty and disinfect all surfaces of prime waste containers.

Dialysis Checklist and Audit Tool: Station Routine Disinfection

Checklist: Dialysis Station Routine Disinfection

This list can be used if there is no visible soil on surfaces at the dialysis station. If visible blood or other soil is present, surfaces must be cleaned prior to disinfection. The proper steps for cleaning and disinfecting surfaces that have visible soil on them are not described herein. Additional or different steps might be warranted in an outbreak situation. Consider gathering necessary supplies² prior to Part A.

Part A: Before Beginning Routine Disinfection of the Dialysis Station

- Disconnect and takedown used blood tubing and dialyzer from the dialysis machine.
- Discard tubing and dialyzers in a leak-proof container².
- Check that there is no visible soil or blood on surfaces.
- Ensure that the priming bucket has been emptied⁴.
- Ensure that the patient has left the dialysis station⁴.
- Discard all single-use supplies. Move any reusable supplies to an area where they will be cleaned and disinfected before being stored or returned to a dialysis station³.
- Remove gloves and perform hand hygiene.

PART B: Routine Disinfection of the Dialysis Station – AFTER patient has left station

- Wear clean gloves.
- Apply disinfectant⁶ to all surfaces² in the dialysis station using a wiping motion (with friction).
- Ensure surfaces are visibly wet with disinfectant. Allow surfaces to air-dry³.
- Disinfect all surfaces of the emptied priming bucket³. Allow the bucket to air-dry before reconnection or reuse.
- Keep used or potentially contaminated items away from the disinfected surfaces.
- Remove gloves and perform hand hygiene.

Do not bring patient or clean supplies to station until these steps have been completed.

Facility Name: _____ Observer: _____
 Date: _____ Day: M W F Tu Th Sa Shift: 1st 2nd 3rd 4th Start time: _____ AM / PM

Audit Tool: Hemodialysis station routine disinfection observations*

(Use a “√” if action performed correctly, a “Φ” if not performed/ performed incorrectly. If not observed, leave blank. All applicable actions within a row must have “√” for the procedure to be counted as successful.)

*This audit tool applies when there is no visible soil on surfaces at the dialysis station. If visible blood or other soil is present, surfaces must be cleaned prior to disinfection.

Discipline	All supplies removed from station and prime bucket emptied	Gloves removed, hand hygiene performed	Station is empty before disinfection initiated ⁷	New clean gloves worn	Disinfectant applied to all surfaces and prime bucket	All surfaces are wet with disinfectant	All surfaces allowed to dry	Gloves removed, hand hygiene performed	No supplies or patient brought to station until disinfection complete

Discipline: P=physician, N=nurse, T=technician, S=student, O=other

Duration of observation period: _____ Number of procedures performed correctly = _____
 Total number of procedures observed during audit = _____

ADDITIONAL COMMENTS/OBSERVATIONS:

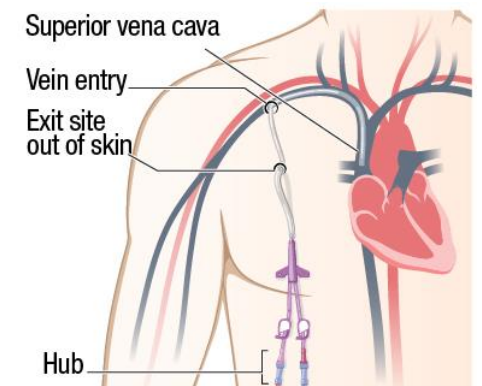
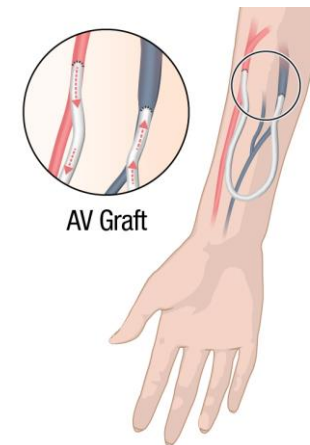
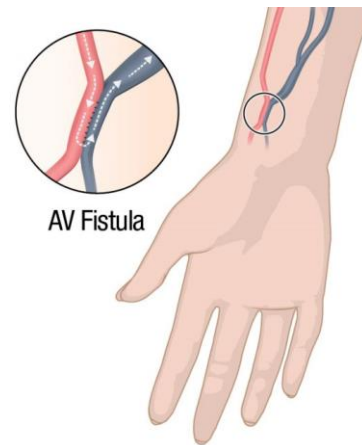
** Ensure the patient has left the dialysis station before disinfection is initiated.



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Types of Access Sites: Risk of Infection



Risk of Infections for Vein Access Types

Arteriovenous (AV) fistula: An access created by joining an artery and a vein, typically in the arm. This access type lasts longer than a graft and is less likely to become infected.

Arteriovenous (AV) graft: An access created when doctors put in a tube that connects an artery and a vein. This access type has a higher risk of infection than an AV fistula but lower than a central-line catheter.

Central-line catheter: An access created by inserting a tube into a vein. The tube is inserted through the skin into a vein in the neck, chest or groin and the tip of the tube ends near the heart. This access type has the highest risk of infection.

***Refer to facility policy/procedure to ensure aseptic technique is followed when prepping tape and during dressing changes.**

Scrub the Hub

Catheter refers to a central venous catheter (CVC) or a central line.

Hub refers to the end of the CVC that connects to the blood lines or cap.

Cap refers to a device that screws onto and occludes the hub.

Limb refers to the catheter portion that extends from the patient's body to the hub.

Blood lines refer to the arterial and venous ends of the extracorporeal circuit that connect the patient's catheter to the dialyzer.

Scrub the Hub (cont.)

Important Take Away:

Aseptic Technique

This includes practices that prevent the contamination of clean/sterile items and surfaces. Once tasks requiring aseptic technique have been started, care must be taken to avoid contamination of gloves and other clean/sterile items that can occur when touching dirty surfaces (e.g., positioning patient, using computer keyboard).

*Use an alcohol-based chlorhexidine (>0.5%) solution as the first-line skin antiseptic agent for central line insertion and during dressing changes. Povidone-iodine (preferably with alcohol) or 70% alcohol are alternatives for patients with chlorhexidine intolerance.

<https://www.cdc.gov/dialysis/prevention-tools/scrub-protocols.html>

Scrub the Hub!

Scrub the hub! Which hubs should 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!

Checklist: Hemodialysis catheter connection

- Wear mask (if required)
- Perform hand hygiene
- Put on new, clean gloves
- Clamp the catheter and remove caps
- Scrub catheter hub with antiseptic
- Allow hub antiseptic to dry
- Connect catheter to blood lines aseptically
- Remove gloves
- Perform hand hygiene



Checklist: Hemodialysis catheter disconnection

- Wear mask (if required)
- Perform hand hygiene
- Put on new, clean gloves
- Clamp the catheter
- Disconnect catheter from blood lines aseptically
- Scrub catheter hub with antiseptic
- Allow hub antiseptic to dry
- Attach new caps aseptically
- Remove gloves
- Perform hand hygiene



Checklist: Hemodialysis catheter exit site care

- Wear mask (if required) and remove dressing
- Perform hand hygiene
- Put on new, clean gloves
- Apply skin antiseptic
- Allow skin antiseptic to dry
- Do not contact exit site (after antiseptics)
- Apply antimicrobial ointment*
- Apply dressing aseptically
- Remove gloves
- Perform hand hygiene

* Use an ointment that does not interact with catheter material



Dialysis Checklist: Catheter Connection, Disconnection and Exit Site Care

Dialysis Audit Tool: Catheter Connection/Disconnection and Exit Site Care

CDC Dialysis Collaborative Facility Name: _____ Date: _____ Start time: _____ AM / PM
 Day: M W F Tu Th Sa Shift: 1st 2nd 3rd 4th Observer: _____ Location within unit: _____

Audit Tool: Catheter connection and disconnection observations

(Use a "✓" if action performed correctly, a "Φ" if not performed. If not observed, leave blank)

Procedure observed, C=connect D=disconnect	Discipline	Mask worn properly (if required)	Hand hygiene performed	New clean gloves worn	Catheter removed from blood line aseptically (disconnection only)	Catheter hub scrubbed	Hub antiseptic allowed to dry	Catheter connected to blood lines aseptically (connection only)	New caps attached aseptically (after disconnecting)	Gloves removed	Hand hygiene performed

Discipline: P=physician, N=nurse, T=technician, S=student, O=other

Duration of observation period = _____ minutes

Number of procedures performed correctly = _____

Total number of procedures observed during audit = _____

ADDITIONAL COMMENTS/OBSERVATIONS:

CDC Dialysis Collaborative Facility Name: _____ Date: _____ Start time: _____ AM / PM
 Day: M W F Tu Th Sa Shift: 1st 2nd 3rd 4th Observer: _____ Location within unit: _____

Audit Tool: Catheter exit site care observations

(Use a "✓" if action performed correctly, a "Φ" if not performed. If not observed, leave blank)

Discipline	Mask worn properly (if required)	Hand hygiene performed	New clean gloves worn	Skin antiseptic applied appropriately	Skin antiseptic allowed to dry	No contact with exit site (after antiseptics)	Antimicrobial ointment applied	Dressing applied aseptically	Gloves removed	Hand hygiene performed	Comments

Discipline: P=physician, N=nurse, T=technician, S=student, O=other

Duration of observation period: _____ minutes

Number of procedures performed correctly = _____

Total number of procedures observed during audit = _____

ADDITIONAL COMMENTS/OBSERVATIONS:

Dialysis Checklist: Injectable Med Preparation and Administration

Checklist: Hemodialysis injectable medication preparation

- Ensure medication preparation area is clean¹
- Inspect medication vial and discard if sterility is questionable²
- Perform hand hygiene
- Prepare medication aseptically
- Disinfect rubber septum of vial with alcohol
- Withdraw medication using a new needle and new syringe³
- Discard single-dose vials and store multi-dose vials appropriately⁴

¹Prepare injectable medications in a designated clean workspace that is free of obvious contamination sources (e.g., blood, body fluids, contaminated equipment, tap water). This workspace should be clearly separated from the patient treatment area, and ideally in a separate room.

²Examine appearance of vial contents for signs of possible contamination (e.g., turbidity, particulate matter). Vials should be discarded if sterility is questionable, the expiration date has been exceeded, or the beyond-use date has been exceeded. If a multi-dose vial will not be immediately discarded after use, the vial should be labeled upon opening to indicate the beyond-use date.

³Medications should be prepared as close as possible to the time of administration. If not immediately administered by the person who prepared the medication, they should be labeled appropriately.

⁴If not discarded, opened multi-dose vials should be stored in a designated clean area in accordance with manufacturer's instructions.



Checklist: Hemodialysis injectable medication administration

Injectable medications should be handled and transported from the medication preparation area in a manner that minimizes contamination risk. The provider administering the medication should also ensure the correct medication and dose are being administered to the correct patient.

- Perform hand hygiene
- Put on new, clean gloves
- Scrub injection port with antiseptic*
- Attach syringe and administer medication aseptically
- Discard syringe
- Remove gloves
- Perform hand hygiene

*The following are appropriate antiseptics: chlorhexidine, povidone-iodine, tincture of iodine, 70% alcohol



Dialysis Audit Tool: Injectable Med Preparation and Administration

Facility Name: _____ Observer: _____
 Date: _____ Day: M W F Tu Th Sa Shift: 1st 2nd 3rd 4th Start time: _____ AM / PM

Audit Tool: Hemodialysis injectable medication administration

(Use a "√" if action performed correctly, a "Φ" if not performed/performed incorrectly. If not observed, leave blank. All applicable actions within a row must have "√" for the procedure to be counted as successful.)

Discipline	Medication properly transported to patient station*	Hand hygiene performed	Clean gloves worn	Injection port disinfected with antiseptic**	Medication administered aseptically	Syringe discarded at point of use	Gloves removed	Hand hygiene performed

Discipline: P=physician, N=nurse, T=technician, S=student, O=other
 Duration of observation period: _____ Number of procedures performed correctly = _____
 Total number of procedures observed during audit = _____

ADDITIONAL COMMENTS/OBSERVATIONS:

* Medications should be transported directly from medication preparation area to individual patient. Medications should be prepared as close as possible to the time of medication administration. Medications that are not immediately administered by the person who prepared the medication must be labeled appropriately.
 **Appropriate antiseptics are chlorhexidine, povidone-iodine, tincture of iodine, and 70% alcohol.

Facility Name: _____ Observer: _____
 Date(s): _____ Location of Medication Preparation: _____

Audit Tool: Hemodialysis injectable medication preparation

Observe a medication preparation session. (Use a "√" if action performed correctly, a "Φ" if not performed/performed incorrectly. If not observed, leave blank. All applicable actions within a row must have "√" for the procedure to be counted as successful.)

Day (i.e., M, Tu, W)	Shift (i.e., 1 - 4)	Discipline	Med prep done in designated area	Med prep area is clean *	All vial(s) are inspected **	Hand hygiene performed	Septum of all vial(s) disinfected	All vials entered with new needle and new syringe	Med prep done aseptically	All single dose vial(s) discarded	All multi dose vial(s) discarded or stored properly

Discipline: P=physician, N=nurse, T=technician, S=student, O=other
 Number of sessions performed correctly = _____
 Total number of sessions observed = _____

ADDITIONAL COMMENTS/OBSERVATIONS:

*Preparation of injectable medications must be performed in a designated clean area that is free of obvious contamination sources (e.g., blood, body fluids, contaminated equipment, tap water).
 **Vial should be discarded if sterility is questionable, or expiration date or beyond-use date has been exceeded. If a multi-dose vial will not be immediately discarded after use, the vial should be labeled upon opening to indicate the beyond-use date.

Dialysis Checklist: AV Fistula/Graft Cannulation and Decannulation

Checklist: Arteriovenous fistula/ graft cannulation

- Clean site with soap and water
- Perform hand hygiene (staff)
- Put on new, clean gloves
- Apply skin antiseptic and allow it to dry
- Do not contact site (after antisepsis)
- Insert needles aseptically
- Connect to blood lines aseptically
- Remove gloves
- Perform hand hygiene

Checklist: Arteriovenous fistula/ graft decannulation

- Perform hand hygiene (staff)
- Put on new, clean gloves
- Disconnect from blood lines aseptically
- Remove needles aseptically and activate needle retraction device
- Clean gloves worn (patient and/or staff) to compress site
- Apply clean gauze/bandage to site
- Remove gloves (staff and/or patient)
- Perform hand hygiene (staff and/or patient)

Dialysis Audit Tool: AV Fistula/Graft Cannulation and Decannulation

CDC Dialysis Collaborative Facility Name: _____ Date: _____ Start time: _____ AM / PM
 Day: M W F Tu Th Sa Shift: 1st 2nd 3rd 4th Observer: _____ Location within unit: _____

Audit Tool: Arteriovenous fistula/graft cannulation observations

(Use a "√" if action performed correctly, a "Φ" if not performed. If not observed, leave blank)

Discipline	Site cleaned with soap and water	Hand hygiene performed (staff)	New, clean gloves worn	Skin antiseptic applied appropriately	Skin antiseptic allowed to dry	No contact with fistula/graft site (after antiseptics)	Cannulation performed aseptically	Connect to blood lines aseptically	Gloves removed	Hand hygiene performed	Comments

Discipline: P=physician, N=nurse, T=technician, S=student, O=other

Duration of observation period = _____ minutes Number of procedures performed correctly = _____

Total number of procedures observed during audit = _____

ADDITIONAL COMMENTS/OBSERVATIONS:

CDC Dialysis Collaborative Facility Name: _____ Date: _____ Start time: _____ AM / PM
 Day: M W F Tu Th Sa Shift: 1st 2nd 3rd 4th Observer: _____ Location within unit: _____

Audit Tool: Arteriovenous fistula/graft decannulation observations

(Use a "√" if action performed correctly, a "Φ" if not performed. If not observed, leave blank)

Discipline	Hand hygiene performed (staff)	New, clean gloves worn	Disconnect from blood line aseptically	Needles removed aseptically	Clean gloves worn (by patient/staff) to compress site	Clean gauze /bandage applied to site	If other activities performed between needle removals, hand hygiene is performed and new, clean gloves are worn	Staff gloves removed	Staff hand hygiene performed	Patient gloves removed and hand hygiene performed (if applicable)	Comments

Discipline: P=physician, N=nurse, T=technician, S=student, O=other

Duration of observation period = _____ minutes Number of procedures performed correctly = _____

Total number of procedures observed during audit = _____

ADDITIONAL COMMENTS/OBSERVATIONS:

Patient Education: 6 Tips to Prevent Infection

Fistulas or Grafts

1. Take care of your dialysis access site at home. Avoid scratching or picking it.
2. Wash your hands often, especially before and after dialysis treatment.
3. Wash or cleanse your dialysis access site prior to treatment.
4. Know the steps your healthcare providers should take when using your dialysis access for treatment.
5. Know the signs and symptoms of infection and what to do if you think you might have an infection.
6. Know what to do if you have any problem with your dialysis access site.

Catheters

1. Catheters have a higher risk of infection. Ask your doctor about getting a fistula or graft instead.
2. Learn how to take care of the catheter at home. Do not get it wet.
3. Wash your hands often, especially before and after dialysis treatment.
4. Know the steps your healthcare providers should take when using the catheter for treatment.
5. Know the signs and symptoms of infection and what to do if you think you might have an infection.
6. Know what to do if you have any problem with the catheter.

Infection Control Program

Infection control practices for hemodialysis units:

- Infection control precautions specifically designed to prevent transmission of bloodborne viruses and pathogenic bacteria among patients
- Routine serologic testing for hepatitis B virus and hepatitis C virus infections.
- Vaccination of susceptible patients against hepatitis B
- Isolation of patients who test positive for hepatitis B surface antigen
- Keep up-to-date on all vaccinations (hepatitis B, flu, PNA, COVID-19, etc.)

Surveillance for infections and other adverse events.

Infection control training and education:

- Healthcare providers
- Patients

Speaking Up: Making Dialysis Safer for Patients

- Patients on dialysis are encouraged to post this video on social media and share with family and friends.
- Dialysis clinics are encouraged to show the video during dialysis treatments, play it in waiting rooms and post links within patient and staff educational material.

Patient education video (Speak Up)

https://www.cdc.gov/dialysis/patient/speak-up-video.html#anchor_1579633659273

References

- APIC Implementation Guides Infection Prevention and Control in Dialysis Settings. https://apic.org/wp-content/uploads/2022/04/Dialysis_ImplementGuide3.pdf.
- <https://www.cdc.gov/dialysis/index.html>
- <https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.modernhealthcare.com%2Fpatient-care%2Fdialysis-centers-face-significant-challenges-protecting-patients-covid-19&psig=AOvVaw0uVis8hWeEXnFS-PkeddWX&ust=1650826914229000&source=images&cd=vfe&ved=0CAwQjRxqFwoTCKDh3dTvqvcCFQAAAAAdAAAA>
- https://www.google.com/search?q=hemodialysis+machines&tbm=isch&ved=2ahUKEwi40IWu8ar3AhWZUs0KHaGWBv8Q2-cCegQIABAA&oq=hemodialysis+machines&gs_lcp=CgNpbWcQARgAMgcllxDvAxAnMgYIABAHEB4yBggAEAcQHjIGCAAQBxAeMgQIABAYMgQIABAYUABYAGD1RWgAcAB4AIABRYgBRZIBATGYAQCqAQtnD3Mtd2I6LWltZ8ABAQ&sclient=img&ei=9E5kYriGG5mltQahrZr4Dw&bih=534&biw=1156&rlz=1C1GCEB_enUS918US918
- https://www.google.com/search?q=hemodialysis+cleaning+machines&tbm=isch&ved=2ahUKEwjnyM2B8qr3AhWPrmoFHSusDNEQ2-cCegQIABAA&oq=hemodialysis+cleaning+machines&gs_lcp=CgNpbWcQDDoHCCMQ7wMQJzoGCAAQBxAeOgQIABAYUKUXWNonYKU4aABwAHgAgAFQiAGEBZIBAjEwmAEAoAEBqgELZ3dzLXdpei1pbWfAAQE&sclient=img&ei=o09kYqfrKY_dqtsPq9iyiA0&bih=534&biw=1156&rlz=1C1GCEB_enUS918US918
- <https://www.cdc.gov/dialysis/prevention-tools/scrub-protocols.html>
- <https://www.nephroplus.com/know-your-hemodialysis/>
- https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.researchgate.net%2Ffigure%2FTypical-setting-for-hemodialysis-courtesy-of-Ehealthhut-C-wwwhealthhutcom_fig2_343212488&psig=AOvVaw0s-FgsE8GIxXeeGO7Xt8f_a&ust=1651026744134000&source=images&cd=vfe&ved=2ahUKEwix0YeG2LD3AhXzgzokEHWTtD3oQjRx6BAGAEAs
- https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6008a4.htm?s_cid=mm6008a4_w

Tools

Engaging Patients in the Infection Prevention Conversation

<https://www.cdc.gov/dialysis/pdfs/EngagingPatients-Comic-508.pdf>

Scrub the Hub

https://www.jointcommission.org/-/media/tjc/documents/resources/health-services-research/clabsi-toolkit/clabsi_toolkit_tool_3-21_scrub_the_hubpdf.pdf?db=web&hash=79BF0D29BD4AAF13DEC3C3DE5AB90494&hash=79BF0D29BD4AAF13DEC3C3DE5AB90494

You can find resources and learn more about CDC's work to reduce infections at www.CDC.gov/dialysis.

"Speak Up: Making Dialysis Safer for Patients" video is available at www.CDC.gov/dialysis/patient/speak-up-video.html.

Questions?

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