Project SAP: Sepsis Awareness and Prevention

Facility Selection

The Network has reviewed data from all facilities to determine areas where additional intervention and support is needed. Facilities with five or more sepsis admissions over the past 12 months will participate in Project SAP between June – November 2025. Please utilize this project packet to assist your facility with best practice interventions.

Intended Goals

- Bring more awareness to patients and staff about sepsis.
- Ensure measures are implemented to prevent sepsis.
- Reduce the number of hospitalizations related to sepsis.

Interventions

Some timelines for completion will vary based on your facility workflow. You will have the autonomy to determine when you complete each task as long as they are completed in good faith before the end of the measurement period on October 31, 2025.

Throughout the project period, you will complete the following interventions.

Patient Education and Awareness

- ☐ Distribute the "Signs of Sepsis and Infection at Home" (found in Appendix A) to all patients and review for understanding.
- ☐ Display a sepsis educational bulletin board in an area where patients and staff can see the materials (i.e., lobby). Sample materials and resources are available in Appendix A.
- ☐ Ensure transparency regarding infections by hanging the following poster in a high traffic area at your facility (you may add to bulletin board or different location):
  - CDC's Days Since Last BSI Poster
- ☐ Ensure patients understand the importance of vaccinations. Review the material in Appendix B.

OPTIONAL: Play the ESRD Network Sepsis Awareness Dialysis Jeopardy Game.

Staff Education and Awareness

July

- ☐ At least one member of your staff attends the monthly Qsource ESRD Network Infection Prevention Education Series.
  - Topic: Hand Hygiene, PPE Donning and Doffing (30 mins)
  - Date/Time: TBA (Recording will be available)
- ☐ Complete a staff meeting or homeroom using the provided Project Firstline "Hand Hygiene for Infection Prevention in a Dialysis Setting Huddle Up Sheet" provided in Appendix B. Complete a staff sign-in sheet and email to your Network Quality Improvement Advisor once education is complete.

☐ Complete a staff meeting or homeroom using the provided Project Firstline "PPE for Infection Prevention in a Dialysis Setting Huddle Up Sheet" provided in Appendix B. Complete a staff sign-in sheet and email to your Network Quality Improvement Advisor once education is complete.

☐ Using the CDC Hand Hygiene Audit, have a patient(s) complete 10 audits over staff hand hygiene practices.

August

☐ At least one member of your staff attends the monthly Qsource ESRD Network Infection Prevention Education Series.

- Topic: CVC and Vascular Care (30 minutes)
- Date/Time: TBA (Recording will be available)

☐ Complete a staff meeting or homeroom using the provided American Society of Nephrology: "Decreasing the Risk of Dialysis-Related Infections: Central Venous Catheters" Key Highlights and Resources Sheet in Appendix B. Complete a staff sign-in sheet and email to your Network Quality Improvement Advisor once education is complete.

☐ Complete five of each of the following CDC audits:

1. Catheter Care
    a. Resource(s):
        i. CDC Hemodialysis CVC Scrub-the Hub Protocol
        ii. CDC Hemodialysis Catheter Disconnection Checklist
        iii. CDC Hemodialysis Catheter Connection Checklist
2. Catheter Exit Site Care
    a. Resource:
        i. Hemodialysis Catheter Exit Site Care Checklist
3. AV Fistula and Graft Cannulation and Decannulation
    a. Resource(s):
        i. CDC AV Fistula and Graft Cannulation Checklist
        ii. CDC AV Fistula and Graft Decannulation Checklist

September

- ☐ At least one member of your staff attends the monthly Qsource ESRD Network Infection Prevention Education Series.
  - Topic: EVS Processes and Product Use (30 minutes)
  - Date/Time: TBA (Recording will be available)
- ☐ Complete a staff meeting or homeroom using the provided Project Firstline "Environmental Cleaning and Disinfection for Infection Prevention in a Dialysis Setting Huddle Up Sheet" provided in Appendix B. Complete a staff sign-in sheet and email to your Network Quality Improvement Advisor once education is complete.
- ☐ Complete 10 CDC Dialysis Station Disinfection Audits.
  - Resource(s):
    - CVC Dialysis Station Routine Disinfection Checklist
    - CDC Environmental Surface Disinfection in Dialysis Facilities

- ☐ **Sepsis Awareness Month Spotlight Activity:** Screen at-risk patients at each treatment (signs and symptoms of infection, open wounds, recent illness, etc.) using the "ESRD SBAR for Sepsis" tool provided in Appendix A, or another screening tool of your choice.

October

- ☐ At least one member of your staff attends Qsource ESRD Network Infection Prevention Education Series.
  - Topic: Injection Safety (30 minutes)
  - Date/Time: TBA (Recording will be available)
- ☐ Complete a staff meeting or homeroom using the provided Project Firstline "Injection Safety for Infection Prevention in a Dialysis Setting Huddle Up Sheet" provided in Appendix B. Complete a staff sign-in sheet and email to your Network Quality Improvement Advisor once education is complete.
- ☐ Complete 5 CDC Injection Safety Audits.
  - Resource(s):
    - CDC Hemodialysis Injection Safety: Medication Administration Checklist
    - CDC Hemodialysis Injection Safety: Medication Preparation Checklist

Optional, but encouraged:

☐ Schedule an Infection Control Assessment and Response (ICAR) visit with your state Healthcare Associated Infections team. During the non-punitive and free visit to your facility, the HAI team members will assess your infection control practices and provide you with a full report of opportunities to improve your infection control practices.

- Chicago Department of Public Health: projectfirstline@cityofchicago.org
- Illinois Department of Public Health: dph.dialysis@illinois.gov
- Kansas Department of Health & Environment-Healthcare Associated Infections & Antimicrobial Resistance Section: kdhe.HAIAR@ks.gov
- Nebraska Infection Control Assessment & Promotion Program (ICAP): NebraskaICAP@Nebraskamed.com
- Missouri Department of Health & Senior Services Healthcare-Associated Infections & Antimicrobial Resistance: HAI_Reporting@health.mo.gov
- Iowa Department of Health & Human Services Healthcare-Associated Infections: HAI-AR@idph.iowa.gov

☐ Designate staff members to complete The American Society of Nephrology (ASN) and Centers for Disease Control and Prevention (CDC) developed Project Firstline education modules:

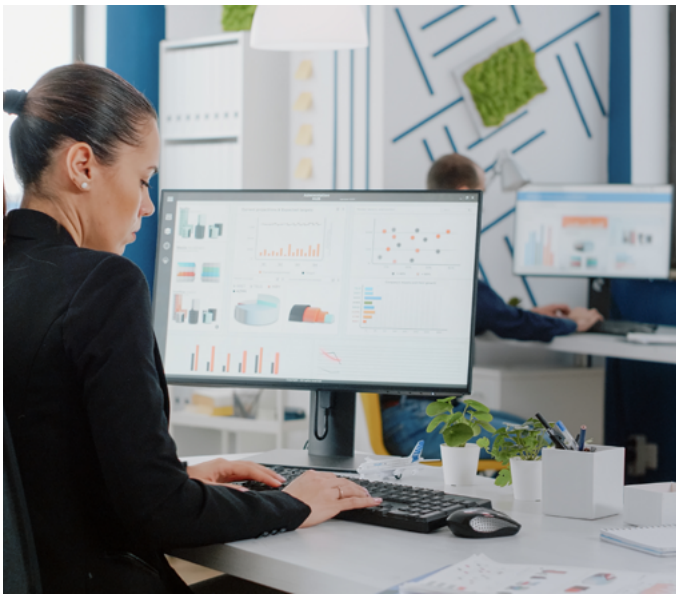
1. Hand Hygiene for Infection Prevention in a Dialysis Setting (15 minutes).
    a. Resource(s):
        i. CDC Staff Conversation Guide: Hand Hygiene When Outside the Dialysis Facility
        ii. CDC Hand Hygiene When Outside the Dialysis Facility (Patient Education)
2. Personal Protective Equipment (PPE) for Infection Prevention in a Dialysis Setting (15 minutes)
3. Environmental Cleaning and Disinfection for Infection Prevention in a Dialysis Setting (15 minutes).
4. Injection Safety for Infection Prevention in a Dialysis Setting (RNs only, 15 minutes).

* It is free to register and offers CE's. If staff want to receive CE's, they will need to register and complete the modules individually.

Reporting and Data Review

Over the course of the project, Network and facility staff will review and monitor both internal and external data related to sepsis hospitalizations, as the data becomes available.

To ensure project requirements are met, complete the brief surveys emailed by the Network each month. Surveys will include submission of internal audits.



Tips for Success

- Identify a specific staff member to champion each intervention. You are not meant to do this work alone.
- Set intermittent goals for the facility to complete interventions (ex: at least half of staff will complete the staff education modules by [insert date] or we will have bulletin board completed by [insert date]).
- Include discussion of interventions during QAPI meetings (use this time to update everyone on the progress made).
- Keep track of the number of audits, screenings, and staff completing education. You will need to report this via the emailed surveys.

Appendix A

Qsource Sepsis Bulletin Board Kit

Download

Materials for Sepsis Bulletin Board

- Pink is the official Sepsis Awareness color
- September is Sepsis Awareness Month
- September 13, 2025 is World Sepsis Day
- Sepsis Facts:
  - Sepsis Alliance Fact Sheet
  - Sepsis Fact Sheet World Sepsis Day
- Additional material, including information in Spanish, can be found at:
  - Sepsis Poster and Resources
  - End Sepsis Resources
  - Sepsis Information Guides
  - World Sepsis Day (September 13) Toolkits (includes material in multiple languages including Spanish, Portuguese, French, Italian, Arabic, Turkish, Finnish, German, Croatian, and Czech)

When it comes to sepsis, remember ***IT'S ABOUT TIME***™. Watch for:

T — **TEMPERATURE** higher or lower than normal

I — **INFECTION** may have signs and symptoms of an infection

M — **MENTAL DECLINE** confused, sleepy, difficult to rouse

E™ — **EXTREMELY ILL** severe pain, discomfort, shortness of breath

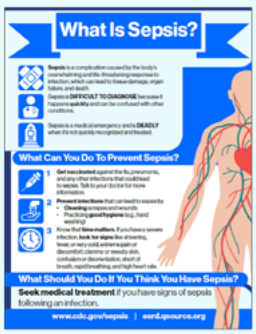
If you experience a combination of these symptoms: seek urgent medical care, call 911, or go to the hospital with an advocate. Ask: **"Could it be sepsis?"**

 sepsis.org SEPSIS ALLIANCE

Qsource Additional Resources

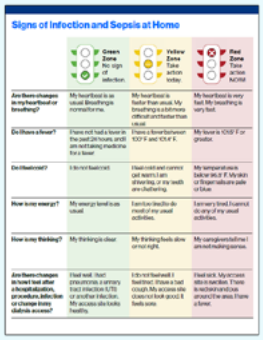
Handwashing Step-by-Step Guide

English | Spanish



What is Sepsis?

English | Spanish



Signs of Infection and Sepsis at Home

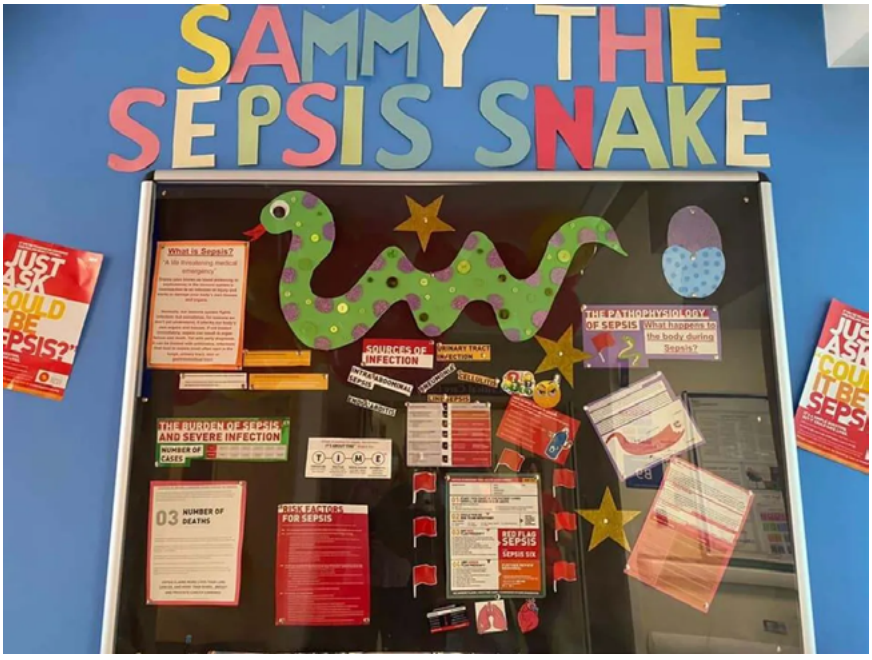
English | Spanish

ESRD SBAR for Sepsis

Download

Display Examples

Source: https://www.worldsepsisday.org/wsd2020preview

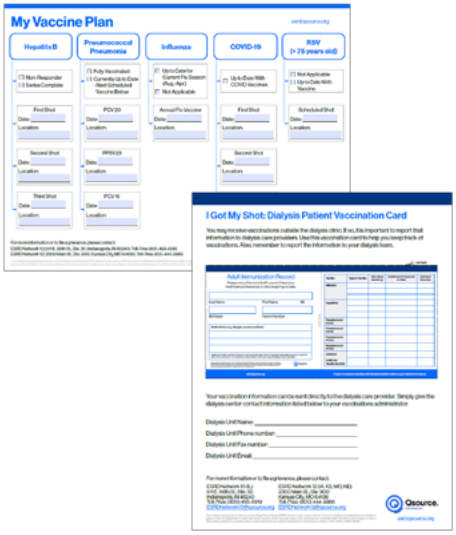


Source: https://www.expressandstar.com/news/health/2021/09/16/wolverhampton-nhs-trusts-sepsis-awareness-campaign/

Browse for more ideas online.

Appendix B

Vaccination Materials



- Institute for Vaccine Safety
- Dialysis Patient Vaccination Card
- How to Have Conversations About Vaccines
- Build a Strong Defense Bulletin Board Kit
- Build a Strong Defense Poster
- Build Your Knowledge-Vaccine Recommendations
- My Vaccine Plan

Influenza

- Vaccine Clinic Checklist
- EQRS Dashboard – Facility Influenza Vaccinations
- Flu Vaccine Reporting Guidance

Pneumococcal

- Pneumococcal Vaccine Timing
- Get the 20 Patient Poster
- Get the 20 Patient Flyer
- Get the 20 Pneumonia Staff Handout
- PneumoRecs VaxAdvisor – Mobile App for Vaccine Providers
- EQRS Dashboard – Facility Pneumococcal Vaccinations

Decreasing the Risk of Dialysis-Related Infections: Central Venous Catheters

February 14th, 2025

Priya Nori, MD

Priya Nori, MD, is an adult Infectious Diseases physician at the Montefiore Health System/Albert Einstein College of Medicine where she directs the Antimicrobial Stewardship Program and is an Associate Professor of Medicine.

Michelle Monk, MSW, RYT 200

Michelle is the Clinical Social Work Coordinator for the UVA Health Dialysis Program, has been a dialysis social worker for UVA Health for the past 12 years.

Rason Hunter, CCHT-IV, AAM, WRE, CFP

Rason currently works for Fresenius Kidney Care as the Regional Lead for the Eastern Virginia area. He has been in Nephrology for 28 years and has been the Regional Lead for the past 4 years. Rason serves as the Area Access Manager, Water Room Expert, Clinical Floor Preceptor, and he is the President of the Virginia Chapter of the National Association for Nephrology Technicians (NANT).

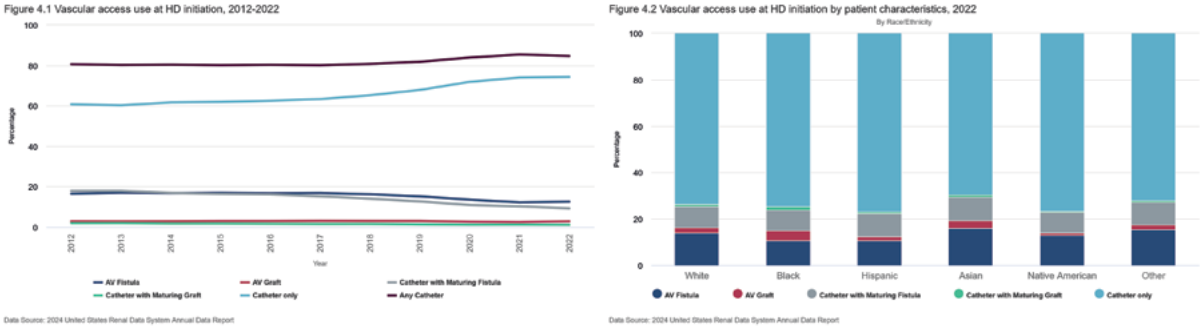
Tiffaney Holm, BSN, RN

Tiffaney works for Sanford Health and lives in Northern Minnesota. She has worked in dialysis for over 15 years. Tiffaney began her career in dialysis as a technician and has been a registered nurse for the past 11 years. She holds a leadership position in the White Earth Dialysis Unit and manages the Detroit Lakes Dialysis Unit.

Unini Odama, MD, MPH, MBE

Dr. Odama is a Nephrologist and Vice President of Medical Affairs for DaVita Kidney Care. At DaVita, Dr. Odama leads the infection prevention program and the health equity team. In addition, Dr. Odama is a bioethicist and serves as a teaching faculty in global health ethics at the Harvard Medical School Center for Bioethics.

Why this Telementoring Series Exists:



United States Renal Data System. 2024 USRDS Annual Data Report: Epidemiology of kidney disease in the United States. National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD, 2024.

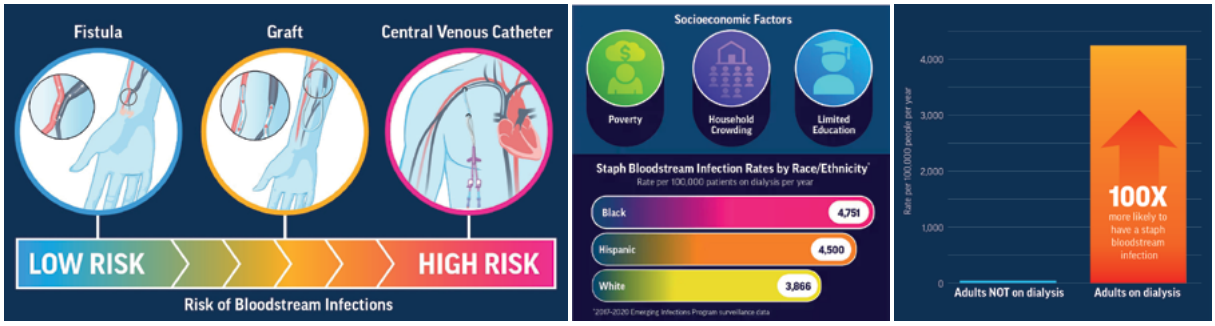
According to the 2024 USRDS report, the percentage of individuals initiating hemodialysis with a catheter with or without a maturing arteriovenous fistula or graft increased by 3.9% to 84.7% and a higher percentage of White and Asian individuals who initiated hemodialysis did so with a functioning permanent Access compared with Black, Native American and Hispanic individuals.

Additionally, a recent CDC vital signs report showed that certain dialysis patients have a higher risk of bloodstream infection. The report showed, for example, that Hispanic patients on dialysis had a 40% higher risk of staphylococcal bloodstream Infection than White patients on dialysis.

In addition to racial and ethnic disparities, the CDC vital signs report showed that a disproportionately higher number of patients with Staphylococcus aureus bloodstream infection lived in parts of the US with higher poverty, more household crowding and lower educational levels.

To highlight opportunities to eliminate these disparities and reduce bloodstream infection risk, we developed this tele mentoring series, bringing together healthcare professionals from infection prevention and dialysis settings across the country.

This session focuses on central venous catheters, the dialysis access type with the highest infection risk.



CDC. Preventing Bloodstream Infections in People on Dialysis. Centers for Disease Control and Prevention. Published February 6, 2023. https://www.cdc.gov/vitalsigns/dialysis-infections/

Key Highlights from this Session:

Objective #1:

Analyze the role of social determinants of health in educating people on dialysis about the risk of infection with central venous catheters.

- Many factors contribute to an individual's risk of infection.
- You can understand someone's individual risk factors by learning more about a person's:
  - Lifestyle
  - Work
  - Family and home environment
  - Living conditions
  - Support structures - or lack of them
  - Others living in the home
  - Access to transportation
  - Cultural influences
  - Financial situation
  - Social and emotional health status
  - Stress levels
  - Literacy level and any language barriers
- Take all of these factors into account when determining the most appropriate education plan for each person.

Objective #2:

Demonstrate effective communication strategies for discussing infection prevention with a patient who is newly starting dialysis and requires a central venous catheter, taking individual social determinants of health into account.

1. Build rapport and a trusting relationship with the patient over time.
2. Provide education early and repeat often over time.
3. Consider the timing of education: At what point during their treatment are they most alert and receptive to education?
4. Break education into smaller pieces to not overwhelm the patient.
5. Tailor communication based on an individual's reading level, using a picture or diagrams when necessary.
6. In cases where there is a language barrier, use a translator.
7. Include family members or care partners in education.
8. Use the "teach back" method.

Objective #3:

Identify strategies to reduce the risk of infection for dialysis patients with central venous catheters.

1. When a CVC is inserted, a strategy for transition to a fistula/graft and CVC removal should also be implemented.
2. Engage the full interdisciplinary team. Talk with patients to better understand and overcome individual patient barriers.
3. Communicate the benefits of removing the CVC, such as, better dialysis, being able to swim or shower, etc.

Some dialysis providers have policies and procedures in place that allow for patients to shower with CVCs, with the proper training and supplies. However, this may not be the practice with every dialysis provider. In the Guidelines for the Prevention of Intravascular Catheter-Related Infections (https://www.cdc.gov/infection-control/media/pdfs/Guideline-BSI-H.pdf), the Centers for Disease Control and Prevention includes the following language:

> 5. Do not submerge the catheter or catheter site in water. Showering should be permitted if precautions can be taken to reduce the likelihood of introducing organisms into the catheter (e.g., if the catheter and connecting device are protected with an impermeable cover during the shower) [90–92]. *Category IB*

Overall, more research needs to be done on this topic, as there are currently very few studies that look at infectious outcomes related to showering with a catheter that is protected versus not allowing this activity.

4. Offer a reward or prize for removing the CVC.
5. Use a huddle board or daily huddle to provide updates on an individual's dialysis access status.
6. Be flexible in scheduling so patients have the opportunity to schedule appointments when it's convenient for them.
7. Follow the CDC Best Practices for Bloodstream Infection Prevention in Dialysis Setting.

Objective #4:

Summarize how all members of the care team can contribute to patient education and support ongoing reinforcement of infection prevention practices.

1. As a Social Worker, Michelle has a different dynamic with the patient and sometimes the patient shares information with her that they might withhold from the rest of the care team.
2. As a Nurse, Tiffaney works closely with other members of the interdisciplinary team (the nephrologist, dietician, social worker, technicians, etc.). During monthly care team meetings, they discuss each patient with CVCs to ensure a plan is in place for removal.
3. As a Technician, Rason has additional smaller weekly meetings to ensure critical barriers are addressed. Finding someone on the team who relates to another person can provide additional comfort that makes a person feel more at ease.
4. Dr. Odama emphasizes that there should be a "person centered approach" and alignment across the teams. Being a unified front and relating to the patient on a personal level is important in establishing the best outcome for care.

Huddle Up!

Project Firstline: Hand Hygiene for Infection Prevention in a Dialysis Setting

Hand hygiene is a critical practice for infection control in healthcare settings. Patients receiving dialysis are especially vulnerable to infections. Even when you are busy, it is still important to take a few extra minutes and properly wash your hands to avoid spreading germs to vulnerable kidney disease patients.

Why is Hand Hygiene So Important?

- Healthcare workers perform hand hygiene **less than half** of times than required.
- Between 2014-2018, **134,961 bloodstream infections were reported in patients receiving dialysis** and 76% of those infections were related to poor hand hygiene.

Common Mistakes

- Cannulating, accessing a catheter, or administering medications prior to cleaning hands
- Not washing with soap and water when hands are visibly dirty
- Forgetting to clean hands after touching PPE, personal items such as a phone or watch, or areas in the dialysis station (germ reservoirs)

- Failure to clean hands after removing gloves
- Not teaching patients about proper hand hygiene

How to Improve Hand Hygiene Practices

Taking steps to improve hand hygiene can significantly reduce infection risk. Consider assessing the following things:

1. Is your work setup conducive to hand hygiene? Consider the placement of sanitizer, sinks, and glove boxes.
2. Can you recognize areas in the facility where germs live and know how to properly disinfect them or when to clean hands after touching them?
3. What personal habits can you improve that lead to more frequent handwashing? Consider loose glasses or clothing items that need to be adjusted often.
4. Does your facility have a positive infection control culture? Consider if patients and staff are comfortable addressing poor hand hygiene with each other.

Reference:
CDC's Project Firstline. (2023). *Hand hygiene for infection prevention in a dialysis setting*. Retrieved from: https://edhub.ama-assn.org/cdc-project-firstline/interactive/18754447#section-248823799

Huddle Up!

Project Firstline: Personal Protective Equipment (PPE) for Infection Prevention in a Dialysis Setting

Personal Protective Equipment (PPE) is designed to create a barrier between you, your patient, and germs. Proper use is essential in the dialysis setting due to the increased exposure of blood and bodily fluids. **Remember that PPE ensures patient and provider protection!** PPE includes gloves, goggles, face shields, gowns, and masks.

Common Mistakes

- Inconvenient PPE locations – you are less likely to use PPE if it takes longer to locate it
- Completing a quick task (such as addressing a machine alarm) by wrapping a glove around a finger instead of putting the glove on
- Not washing hands after taking gloves off or adjusting PPE
- Storing supplies in gown pockets and not properly securing gowns
- Reusing PPE that is soiled or has been exposed to bodily fluids
- Improper PPE sizes: ill-fitting masks or wearing the mask under the nose, loose gloves and gowns
- Inconsistent disinfection of reusable PPE like goggles or face shields

How to Improve PPE Practices

1. Can you recognize areas in the facility where germs live and know how to properly disinfect them or when to wear proper PPE around these areas?
2. Consider the workflow and setup of the facility. Is PPE stored in a convenient location? Can it be properly disposed of when contaminated? When caring for a patient and PPE becomes dirty, is it easy to dispose, wash hands, and don new PPE?
3. Can you improve any personal habits that inhibit proper use of PPE? Consider long nails or jewelry that may damage PPE or loose glasses that need frequent adjusting.
4. Does your facility routinely discuss infection control and ways to improve it? This creates a positive patient safety culture.

Reference:
CDC's Project Firstline. (2023). *Personal protective equipment (PPE) for infection prevention in a dialysis setting*. Retrieved from: https://edhub.ama-assn.org/cdc-project-firstline/interactive/18754450

Huddle Up!

Project Firstline: Injection Safety for Infection Prevention in a Dialysis Setting (RNs only)

The Centers for Disease Control and Prevention (CDC) reports **50 outbreaks of infection related to unsafe injection practices since 2001. These outbreaks affected more than 150,000 patients including patients receiving dialysis**. State health departments increasingly request assistance from the CDC to investigate outbreaks that may stem from unsafe injection practices.

Common Mistakes

- Preparing medications in an area that is not a designated clean area
- Not disinfecting the medication vial's rubber septum
- Using a needle that has been uncapped too early
- Drawing medication from vials that are undated
- Improper disinfection of medication ports
- Failure to clean heads before and after administering medications
- Incorrectly disposing of syringes and needles in sharps containers
- Not routinely disinfecting the medication preparation area

How to Improve Injection Safety

1. Consider the setup of your facility – do you have injection equipment stored in clean and easily accessible areas? How often do you clean the medication room and are the disinfection wipes easily available to clean the area? Do you have alcohol wipes readily available to disinfect vials and/or hubs?
2. Review personal habits that could lead to the unintentional spread of germs. Consider things like: frequent PPE or clothing adjustments, opening multiple drawers or cabinets to locate what you need, keeping equipment in your pockets, not routinely checking for expiration dates, and skipping asking the patient for their name and date of birth before administering medication.
3. Ensure the facility has a positive culture surrounding injection safety. Staff and patients should feel comfortable asking questions or addressing concerns with one another. Set an expectation for staff to avoid interruptions during any medication injection task.

Reference:
CDC's Project Firstline. (2023). *Injection safety for infection prevention in a dialysis setting*. Retrieved from: https://edhub.ama-assn.org/cdc-project-firstline/interactive/18754444?resultClick=1&bypassSolrId=M_18754444

Huddle Up!

Project Firstline: Environmental Cleaning and Disinfection for Infection Prevention in a Dialysis Setting

When you look around at your facility, can you say with 100% certainty it is cleaned and disinfected properly? Would you feel safe if you were receiving dialysis here? If not, do you know what steps can be taken to remedy this?

Common Mistakes

- Machines and surfaces not disinfected on a routine basis
- Cleaning stations before the patient has exited the area
- Inadequate dry time and contact time with disinfectant of surfaces before using them
- Failure to empty and disinfect priming buckets
- No standardized process for disinfecting patient stations
- Not washing hands after cleaning and removing gloves
- Allowing too much time to pass before cleaning spills

How to Improve Environmental Cleaning Practices

1. Understand where germs live in the dialysis facility – consider wet and dry surfaces, high touch areas, and personal effects that encounter these areas.
2. Be familiar with how often areas are disinfected, the correct PPE to wear during cleaning, and how to clean blood and bodily fluid spills. Ensure there are policies in place that specify proper disinfectants, frequency of cleanings, and dry times.
3. Assess personal habits such as leaning on surfaces with dirty PPE, switching tasks or being interrupted during the cleaning process, or cleaning surfaces too quickly due to time constraints.
4. Create a culture that allows staff and patients to be comfortable speaking out about environmental cleanliness.

Reference:
CDC's Project Firstline. (2023). *Environmental cleaning and disinfection for infection prevention in a dialysis setting*. Retrieved from: https://edhub.ama-assn.org/cdc-project-firstline/interactive/18754441

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