Objectives

- Identify reasons dialysis patients are at risk for infections.
- Review the Centers for Disease Control and Prevention (CDC) audit tools.
- Engage and empower patients and staff in reducing the bloodstream infection (BSI) rate.
Outline

- BSIs in hemodialysis patients
- CDC 9 Core Interventions: Patient education and hand hygiene observations
- Evidence: Outcomes of prevention efforts
- Making Dialysis Safer for Patients: Using CDC audit tools
Standardized Infection Rate (SIR) or Dialysis Event BSI

![Graph showing the trend of Standardized Infection Rate (SIR) and Dialysis Event BSI from Jan-15 to Jan-19. The graph indicates a peak in Jan-18 with a value of 2.5688, followed by a decline.]
Hemodialysis patients have a higher risk of infection due to the following factors:

- Frequent use of catheters or insertion of needles to access the bloodstream
- Weakened immune systems
- Frequent hospitalizations and surgery
- Diabetes or other comorbidities
Infection Prevention Pledge Sheet

My healthcare team has educated me on good infection prevention practices. I pledge to protect myself and others by doing the following:

- Frequently sanitizing/washing my hands
- Washing and caring for my Vascular Access
- Speaking up and requesting staff members to practice good infection prevention (examples – Proper glove and mask use, hand hygiene, catheter care)
- Notifying my healthcare team if I notice any signs or symptoms of infection

Participant Signature ___________________________ Date ________________

MADE ADDITIONAL COPIES AS NEEDED

To file a grievance please contact ESRO (ESRO Network) at 1-800-824-7122, email: info@esrornetwork.net, 1000 E. Atlanta Office, Suite 270, Raleigh, NC 27601
CLEAN HANDS SAVE LIVES
Protect patients, protect yourself

Influenza
Candida
Staphylococcus
RSV
Klebsiella
Pseudomonas
Enterococcus

Alcohol-rub or wash before and after EVERY contact.

www.cdc.gov/handhygiene
Your 5 Moments for Hand Hygiene

Haemodialysis in ambulatory care

1. BEFORE TOUCHING A PATIENT
   - Clean your hands before touching a patient.
   - To protect the patient against harmful germs carried on your hands.

2. BEFORE CLEAN/ASEPTIC PROCEDURE
   - Clean your hands immediately before performing a sterile or aseptic procedure.
   - To protect the patient against harmful germs, including the patient’s own, from entering his/her body.

3. AFTER BODY FLUID EXPOSURE RISK
   - Clean your hands immediately after a procedure involving exposure to body fluids and after glove removal.
   - To protect yourself and the environmental non-hazardous patient germs.

4. AFTER TOUCHING A PATIENT
   - Clean your hands after touching the patient at the end of the encounter or when the encounter is interrupted.
   - To protect yourself and the environment from harmful patient germs.

5. AFTER TOUCHING PATIENT SURROUNDINGS
   - Clean your hands after touching any object or surfaces in the patient surroundings where a specific zone is temporarily and exclusively dedicated to a patient – even if the patient has not been touched.
   - To protect yourself and the environment from harmful patient germs.

World Health Organization

SAVE LIVES
Clean Your Hands
Do the WAVE against healthcare-associated infections.

It's a great way to help protect loved ones against infections when they're in the hospital.

Created by the HHS Partnership for Patients. Find out more: www.healthcare.gov/partnershipforpatients.
What We Know...

BSIs in dialysis patients are preventable!

❖ Staff and patient education are critical components to reducing infections.

❖ Long term catheters have a significant association with morbidity and mortality due to high infection rates.

❖ Improved infection rates can occur and can be sustained for long period of time.
What We Know (continued)...

If you’re not yet doing these things, get on board!

❖ There are many tools, resources and support available.

Engage all staff!

❖ Share current BSI rates with staff using National Healthcare Safety Network (NHSN) data.

❖ Involve staff with infection control audits and coming up with ways to reduce the BSI rate.
BSI Prevention Toolkit

❖ Patient and staff education
❖ Put Together the Pieces to Prevent Infections in Dialysis Patients
❖ Patient Conversation Starter
❖ Hemodialysis Central Venous Catheter Scrub-the-Hub Protocol
❖ Environmental Surface Disinfection in Dialysis Facilities: Notes for Clinical Manager

www.cdc.gov/pubs
http://www.cdc.gov/dialysis/coalition/resource.html
PUT TOGETHER THE PIECES TO PREVENT INFECTIONS IN DIALYSIS PATIENTS

Engage Patients
Discuss important infection prevention practices like hand hygiene with your patients and their caregivers.

Reduce Catheters
Identify and address barriers to fistula/graft placement and catheter removal.

Perform Hand Hygiene and Change Gloves
Know when it is necessary to perform hand hygiene and change your gloves; put this knowledge into practice.

Catheter Care, Scrub the Hubs
Scrub the catheter hubs and allow them to air dry. Use chlorhexidine with alcohol at the catheter exit site and apply an antimicrobial ointment.

Vaccinate Dialysis Staff and Patients
Make sure staff and patients are up-to-date for influenza and hepatitis B vaccinations and patients have received pneumococcal vaccination.

Disinfect the Dialysis Station
Ensure the station is empty before disinfecting. Visibly wet all surfaces with disinfectant.

Track Infections
Know your facility’s rates for important infections like access site and bloodstream infections.

Follow Safe Injection Practices
Never reuse needles or syringes or administer medications from a single-dose vial or Vial to multiple patients. Use single-dose vials wherever possible and dispose of them immediately after use.

Use Aseptic Technique
Take care to not contaminate the access, bloodlines or hemodialysis circuit. Scrub injection ports prior to use.

www.cdc.gov/dialysis
Conversation Starter to Prevent Infections in Dialysis Patients

Preventing infections is important for patient safety. The Centers for Disease Control and Prevention (CDC) wants dialysis patients and dialysis centers to start a conversation about preventing infections. Family members can also start the conversation. We hope this guide can be a starting point to improve awareness about patient safety issues.

How does this facility involve patients and their families in infection control activities? Are patients encouraged to speak up when they see a concerning practice (for example, a staff member who does not wash her hands)?

Dialysis centers should educate and empower patients to help prevent infections and support a safe care environment. Talk to your social worker or facility administrator for ideas on how you can get involved.

How does this facility make sure that all patients receive necessary vaccines to prevent illness (such as Hepatitis B, seasonal flu, and pneumococcal vaccines)?

Patients on dialysis have weakened immune systems and should get certain vaccines to keep from getting sick.

How does this facility make sure that dialysis center staff are vaccinated against the flu every year?

Sick staff members can spread the flu to patients. Requiring dialysis center staff to get vaccinated each year can help prevent this spread. Dialysis centers should also have policies that support staff to stay home when they are sick.

Does this facility check all patients for hepatitis C infection?

All hemodialysis patients should be tested for hepatitis C when they start treatment at a center, and then every 6 months if they could become infected. Testing is the only way to know if patients have hepatitis C and to find out if the infection is spreading in the facility.

Does this facility prepare medications in a separate room away from dialysis stations to avoid contamination?

Medications for injection should be prepared away from patient treatment areas to keep them safe from germs. One way to do this is to prepare them in a separate room. More information about injection safety can be found at www.onesendonlycampaign.org/

To learn more visit www.cdc.gov/dialysis

Does this facility use the CDC recommendations to help prevent infections?

Regular use of CDC resources and recommendations can keep patients from getting various infections. These recommendations include monitoring staff hand hygience and vascular access care, training staff, and assisting patients in learning about these practices. Facilities should be using these recommendations in giving their staff feedback to know how they are doing. More information can be found at: www.cdc.gov/dialysis/prevention-tools

How does this facility handle cleaning dialysis stations in between patient treatments – specifically, are dialysis stations cleaned while a patient is still in the chair?

Dialysis stations need proper cleaning to prevent spread of germs between patients. CDC has steps for facilities to follow to make sure every station is safe for the next patient. Some steps should not start until the patient has completed their dialysis treatment and left the station. More information can be found at: www.cdc.gov/dialysis/prevention-tools

Does this facility use a new, disposable dialyzer (artificial kidney) with each dialysis treatment? If not, can a patient opt out of reusing the dialyzer?

Reuse dialyzers must be thoroughly cleaned and disinfected after each use, and mistake can occur. Talk to your doctor about whether you could use a disposable dialyzer instead of a reused one.

How does this facility support patients to use a fistula instead of a catheter as early in their treatment as possible?

Sometimes it is medically necessary to use a catheter for dialysis. However, catheters can lead to serious infections and other problems. Fistulas and grafts are safer for most patients. Talk to your care team about what is right for you. More information can be found at: www.aakp.org/store/item/understanding-your-hemodialysis-access-options.html

If there was an outbreak in this facility how would the facility communicate with patients? How would the facility partner with others such as the health department?

Contagious germs can spread through dialysis centers. Finding an outbreak (a sudden increase in numbers of sick persons) early and alerting public health can help to stop the spread of infection.
CDC Infection Control Checklists:

❖ Hemodialysis Catheter Connection

❖ Hemodialysis Catheter Disconnection

❖ Dialysis Station Routine Disinfection

❖ Hemodialysis Catheter Exit Site Care
CDC Infection Control Checklists (cont.):

- Hemodialysis Injection Safety: Medication Preparation
- Hemodialysis Injection Safety: Medication Administration
- Arteriovenous Fistula & Graft Cannulation
- Arteriovenous Fistula & Graft Decannulation
CDC Audit Tools:

❖ Hand Hygiene
❖ AV Fistula & Graft Cannulation and Decannulation
❖ Catheter Connection and disconnection
❖ Dialysis Station Routine Disinfection
❖ Injection Safety: Medication Preparation & Administration

www.cdc.gov/pubs
http://www.cdc.gov/dialysis/coalition/resource.html