

Infection Prevention for Dialysis Patients

On dialysis, infections can be dangerous, even life threatening. Know the risks and how to stay safe.

Tips to Prevent Infections

- ✓ Learn about your treatment plan and your blood flow rate.
- ✓ If you have a central line catheter, ask your healthcare professional if you can use a fistula or graft for your dialysis treatment. (They have lower infection rates than catheters.)
- ✓ Wash your hands often, especially before and after dialysis treatment. Make sure all your providers do the same before and after caring for you or your vascular access (see page 2) site.
- ✓ Know the steps your providers should take when using your dialysis access site for treatment.

Keep Your Access Working

If your access is not working correctly, blood flow will be decreased and dialysis less effective.

Care of Tunneled Catheter	Care of Fistula or Graft
✓ Keep catheter and bandage clean and dry. If either gets wet, call the doctor.	✓ Wash with an antibacterial soap every day and always before dialysis. Do not scratch your skin or pick scab.
✓ Keep an emergency dressing kit at home. Your dialysis team can teach you how to use it.	✓ Check the blood flow several times each day by feeling for a vibration/pulse. If you don't feel it, call your doctor or dialysis center.
✓ Make sure your providers change your dressing at each dialysis session.	✓ Ask your dialysis care team to rotate the needles when you have dialysis treatment
✓ Keep caps and clamps tightly closed when not in use. Air must not enter the catheter.	✓ If you bleed after dialysis, apply gentle (not heavy) pressure with a clean towel. If the bleeding does not stop in 30 minutes, call your doctor.
✓ Tunneled catheters: You can shower/bathe if you have a waterproof dressing - a clear dressing that sticks to your catheter site and the skin around it. Do not put the catheter/site under water.	✓ Do not put pressure on the arm with access. No tight clothes or jewelry; don't carry anything heavy; don't sleep with your head on that arm; no blood pressure cuffs or blood draws.
✓ Wear a mask over your nose/mouth when the catheter is open to keep germs out of the catheter or your blood	

When to Call the Doctor

Check your vascular access every day for signs of infection. Call your doctor if you have:

- Local infection at the access site: Redness, drainage (pus), tenderness, or swelling
- General signs of infection: **Fever of 100.4°F (38°C) or higher** or fever with chills or shaking, feeling sick or weak, sore throat, cough, or burning when urinating.

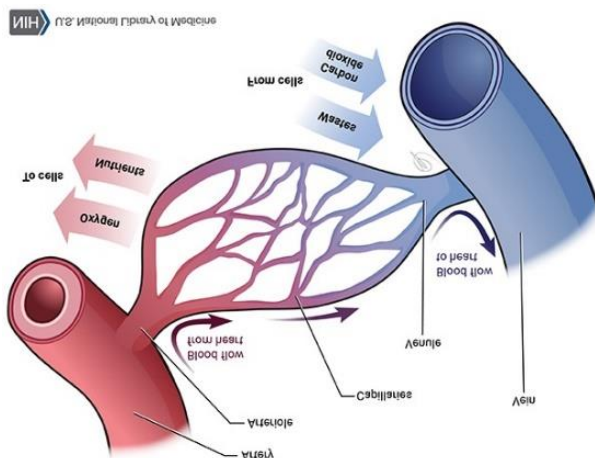
Overview of Hemodialysis

Your kidneys perform several critical functions. They clean your blood and support important bodily functions. When your kidneys cannot do their job, hemodialysis may be needed. Hemodialysis is a way to substitute a machine to do the work of your kidneys. A special filter in the machine, called a dialyzer, cleans your blood and removes extra fluid from your body.

How Hemodialysis Vascular Access Works

Before hemodialysis can be done, a connection must be made to the blood inside your blood vessels. This connection is called vascular access. There are three kinds of access to your blood:

- **AV* Fistula:** an access made by joining an artery and vein, typically in your arm. Usually lasts longer. These direct connections, called native fistulas, have the lowest risk of infection.
- **AV* Graft:** an access made by using a piece of tubing to join an artery and vein, usually in your arm.
- **Central Line Catheter:** a soft tube that is placed in a large vein, often in the chest. Catheters typically have a higher rate of infection than grafts or fistulas. There are catheters that are tunneled (under the skin) and some that are not. The type of catheter you have determines how long it can stay in place and what restrictions you have. For example, if your catheter is NOT tunneled, you may not shower.



* AV stands for *arteriovenous*, which means relating to, or connecting, arteries and veins. In general, arteries are blood vessels that carry blood rich in oxygen and nutrients away from the heart and towards the cells in your body. The cells take in the oxygen and nutrients and put out waste products. Veins carry blood high in waste product towards the heart. As the blood goes through the lungs, it gets picks up oxygen again.

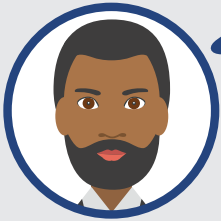
For More Information About Infection and Dialysis

- CDC: Infection Prevention in Dialysis Patients (attached)
- CDC: Dialysis Safety: www.cdc.gov/dialysis
- U.S. Department of Health and Human Services and Centers for Disease Control (CDC)
- National Kidney Foundation: <https://www.kidney.org/atoz/content/dialysisinfo>

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.

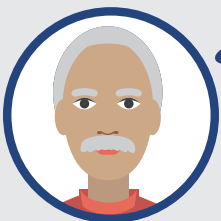


How does this facility make sure that dialysis center staff are vaccinated against the flu every year?

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.oneandonlycampaign.org/



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

Regular use of CDC resources and recommendations can keep patients from getting serious infections. These recommendations include monitoring staff hand hygiene and vascular access care, training staff, and assisting patients in learning about these practices. Facilities should be using these recommendations and 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?

Reused dialyzers must be thoroughly cleaned and disinfected after each use, and mistakes 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.

