

## Hemodialysis Catheters: Preventing Infection

*If you have any questions, please ask your physician.*

A hemodialysis catheter is used to access your blood for hemodialysis. It is a soft tube placed in a large vein in the neck, chest or groin. It is also called a central line or central venous catheter because the catheter passes through the vein directly into the heart. Some may be temporary and only used for a short time. Others may be used longer and left in place for weeks or even months.

Long-term catheters are tunneled under the skin. This keeps the catheter more secure and is less of an infection risk (Figure 1). However, no matter where it is inserted, it always ends up in a large vein close to the heart. A bandage covers the insertion site (where the catheter enters the skin). The picture also shows how the catheter above the bandage is tunneled under the skin until it enters the vein that leads directly to the heart.

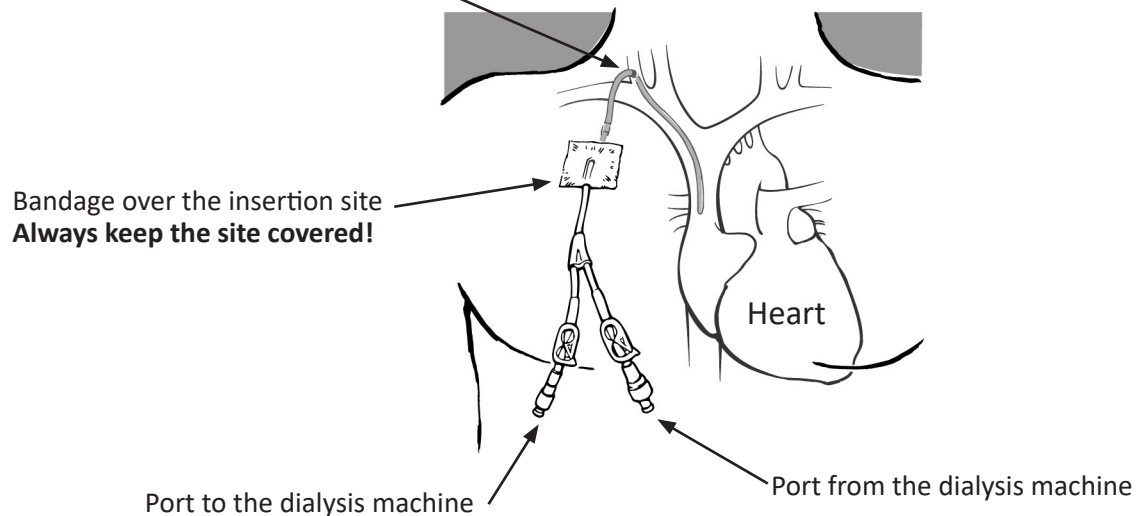
While some catheters may be used to give medication or fluids, or to draw blood, a hemodialysis catheter should only be used for dialysis.

**There is a risk of infection with any type of central line. An infection in the blood is serious and can cause severe medical problems.**

This brochure will tell you how to prevent and recognize a central line blood infection.

**Figure 1. Tunneled hemodialysis catheter**

The tunneled catheter enters the vein



## Central line blood infection

A blood infection can happen when germs enter the blood through the catheter. The physician follows a strict protocol to prevent infection during insertion. Staff also use sterile technique each time they use the catheter or change the bandage.

**A central line blood infection can be life-threatening.** Therefore, it is important to take care to prevent infection.

## How to prevent an infection

Infections can be prevented. Follow these guidelines to help protect yourself.

- Avoid touching the catheter if possible. Harmful germs can cause infection if they enter your body through the catheter.
- There are times when you have to handle the catheter. Good hand cleansing is the most important way to reduce the risk of an infection before handling the catheter or bandage.
  1. Put on a face mask.
  2. Wash your hands thoroughly with soap and water, or use an alcohol-based hand sanitizer.
  3. Once your hands are cleansed, do not touch anything except your catheter.
  4. If you touch anything, such as devices or surfaces, you should wash your hands again before handling the catheter.
- Ask your caregivers (or anyone else) to cleanse their hands before touching your hemodialysis catheter or the bandage. They should:
  1. Put a face mask on.
  2. Wash hands thoroughly with soap and water, or use an alcohol-based hand sanitizer.
  3. Put gloves on.
- Do not let the dialysis catheter, bandage or insertion site get wet.
  - Never cover or soak the catheter or bandage in water.
  - Take extra care to keep the bandage dry when showering or taking a tub bath.
- Check the bandage that covers the catheter every day. If it becomes dirty, wet or loose, or if it comes off, contact your care team right away for a sterile bandage change.
- Check the skin around the bandage every day. Inform your physician or healthcare provider if it is:
  - Red or tender (painful) to touch
  - Stinging or burning
  - Bleeding or draining any fluid

**Your catheter should not be used to draw blood, or to give medications or fluids. Unless it is an emergency, your dialysis catheter should only be used for dialysis.**

Please let any other physicians or healthcare providers know this, especially if they are new to your care.

Ask your care team how long you need to have this catheter. For long-term dialysis, it is better to have an arteriovenous (AV) fistula or graft to avoid the type of infection that may occur with a catheter. Or, you may wish to consider another type of dialysis. Ask your physician or healthcare provider for more information about your options.

## **When to seek medical attention**

Please contact your care team **right away** if you have:

- Tenderness or pain around the catheter site
- Signs of infection around the catheter site (redness, drainage, burning or stinging)
- Fever of 100.4 degrees F or higher
- Chills
- A catheter that falls out, breaks, cracks, leaks or has other damage. Do not use any sharp objects such as scissors or knives near your catheter.

**Important:** If the catheter is accidentally pulled out, apply pressure to the site to stop any bleeding. Cover the site with sterile or clean gauze. Contact your physician or healthcare provider for further instructions.