Preventing Bloodstream Infections from Central Line Catheters

What are central line catheters?
Central line catheters are catheters (tubes) that are inserted into a large vein in the neck, under the collar bone, or through the groin. These veins have a high blood flow and lead directly to the heart.

Central line catheters are used when a patient needs to receive many different types of IV medicines and fluids and have many blood draws. Also, some drug infusions must be given into large veins with a lot of blood flow to help dilute the drug. Instead of giving medicine or drawing blood with a separate shot each time, or using a normal type of IV catheter on the back of the hand or on the arm, these medicines and blood draws are all done through the central line catheter.

Central line catheters are very useful, but they can lead to an infection in your bloodstream. These infections are very rare, but when they occur, they can be serious. University of Washington Medical Center (UWMC) is one of many hospitals across the U.S. that is taking steps to prevent these infections.

What causes an infection from a central line catheter?
If bacteria (germs) travel down the catheter and get into your bloodstream, an infection can occur.

What are the signs of an infection?
Signs of infection are chills and fever. Also, the skin around the catheter where it is inserted may be red and sore.

How is this infection treated?
Antibiotics are used to treat the infection. Sometimes the catheter must be removed. This is a serious infection, but remember, it is very rare.

What is UWMC doing to prevent these infections?
When your catheter is put in place, your health care team will:
- Choose a vein that allows them to insert the catheter safely, where the risk of infection is low.
• Clean their hands with soap and water or an alcohol-based hand gel before putting the catheter in place.
• Keep the catheter sterile (germ-free). This means your health care team will wear a mask and cap, sterile gloves, and a sterile gown. You will be covered with a sterile sheet.
• Clean your skin with an agent that kills germs (an antiseptic) before they place the catheter.

After your catheter is in place, your health care team will:
• Clean their hands, wear gloves, and clean the catheter opening with an antiseptic before using your catheter.
• Wear gloves when they change the bandage that covers your catheter insertion site.
• Carefully handle the medicines and fluids you receive through your catheter.
• Remove the catheter as soon as you do not need it.

What can I do to prevent a bloodstream infection from my central line catheter?
• Ask your health care providers if they are following the above guidelines to prevent infection.
• Tell your nurse if the bandage over your catheter insertion site falls off or gets dirty or wet.
• Tell one of your health care providers if the skin around your catheter is red or sore, you have chills, or you feel like you have a fever.
• Make sure there is always a cap in place at the end of your catheter. Tell your nurse if the cap is off for any reason.
• Make sure that all your health care providers clean their hands before and after they care for you.

If you do not see your health care providers clean their hands, please ask them to.

• Make sure your visitors clean their hands with soap and water or an alcohol-based hand gel before they enter your room and when they leave.
• Do not let your visitors touch any part of your catheter or the bandage over your catheter insertion site.

If you have any questions about your central line catheter, please ask any of your health care providers.