This patient factsheet aims to advise patients and their families on how to prevent infection and care for their Central Venous Catheter, also known as a haemodialysis neckline or Permcath. Because it is inserted into one of your large veins it carries a risk of infection. Therefore it is important that you read and follow the advice given in this document.

What is a Permcath?
A Permcath is a flexible plastic tube that can be put into a vein just below the neck. The tube can then be used for haemodialysis. It is divided into two so that blood can flow in and out at the same time during the haemodialysis treatment.

How does the Permcath work?
When you arrive at the hospital for your dialysis, the nurse will remove the caps and clean the ends of the Permcath. He/she will take a small amount of blood out of each side of the Permcath and discard it to make sure that there are no blood clots present.

The nurse will flush each side of the Permcath with saline. The Permcath can then be connected to the dialysis lines. Blood will come out of one side of the Permcath, it will pass through the dialyser, (artificial kidney), to be cleaned and will return to you through the other side of the Permcath. The blood is flowing continuously around a circuit: there is only a small amount of your blood outside your body at any one time.

At the end of dialysis, all your blood will go back to you. The nurse will put some saline and heparin into both sides of the Permcath so that no blood clots form and put clean caps on.

What are the risks associated with having a Permcath?
The biggest risk is infection. At the end of each branch of the Y there is a cap. These are removed by the nurse each time you have your dialysis treatment and must never be removed between sessions.

If the cap comes off there is a risk that infection may be introduced into the Permcath which could make you feel very unwell. If the ends of the Permcath are exposed to the atmosphere, germs may enter the Permcath and then go into the bloodstream.

If a cap accidentally comes off, then contact your Dialysis Unit straight away. Don’t put the caps on yourself without disinfecting.

Infection may also develop around the exit site. It is important that you recognise the signs and symptoms that may occur should you develop an infection and remember that infections can involve the exit site, tunnel track or bloodstream.

Other risks may include bleeding from the exit site, the Permcath may dislodge or clots may develop in the Permcath itself which may require special “clot busting” treatment by your dialysis nurse.

How will I know if I have developed an infection?
1. You may feel feverish, hot, cold, clammy and shivery especially during 1 hour of Dialysis
2. You may feel generally unwell
3. You may notice redness or discharge from around the exit site
4. You may also feel some pain coming from the exit site area.

**How is the exit site cleaned?**
At each dialysis treatment the nurse will clean around the exit site using a special cleaning agent. This is a type of disinfectant. The nurse will then apply an anti bacterial ointment to the exit site to help prevent infections. A clean soft dressing is then applied.

**Will I have to change the dressing and clean the exit site at home?**
The dressing must always be dry and secure to your skin. This will help prevent infection developing and holds the line firmly to prevent it from pulling. If the dressing becomes wet or loose then you will report to Dialysis unit immediately for changing the dressing.

**How to change the dressing between visits to the Renal Unit?**
Always remember to wash your hands before changing your dressing. Good hand washing is essential; always use liquid soap and a clean towel. Remove any jewellery and have bare arms below the elbow. Wash your hands under running water and concentrate on the areas between your fingers and around your nails.

Always wash your hands thoroughly before any contact with your exit site and do not touch the area unnecessarily. There is always a risk of infection when the exit site is exposed.

1. Check the dressing on removal for any signs of bleeding or pus.
2. Always discard the old dressing into the bin. Wash your hands in-between removal of the old dressing and the application of a clean dressing.
3. Do not use talcum powder or lotions around the exit site. These too could be potentially harmful to you by the introduction of unwanted germs onto your skin.
4. If you have a cold or cough, avoid dressing changes at home or ask someone else to do it for you.

**Will I be able to take a bath or shower with the Permcath in place?**
1. A brief shower is preferable to a bath.
2. Leave the dressing on for the shower/bath.
3. Do not immerse the Permcath in bath water.
4. When the Permcath and dressing are wet, always change the dressing for a dry one following the instructions above.

**Will I be able to swim with the Permcath in place?**
Regrettably swimming is not recommended with a Permcath in place. Swimming pools contain a host of germs which could enter into the exit site. This could cause an infection and make you feel very unwell.

When to contact the Dialysis Unit
1. If you have symptoms of infection as above.
2. If you develop pain in your arm on the same side as your Permcath.
3. The caps come off or the clamps break.
4. A hole or tear appears in the tube.
5. Bleeding occurs from the exit site or tube.

If you develop any of these symptoms you must contact your Dialysis unit immediately.