

Kidneys perform **crucial functions**. When kidneys fail, the blood must be regularly cleansed of toxins and extra fluids by using either an artificial kidney (**hemodialysis**), by introducing a cleansing solution into the abdomen (**peritoneal dialysis**), or by using a donated kidney (**kidney transplant**). With appropriate intervention, patients with complete failure of their kidneys can live full, productive lives. Without treatment or a transplant, individuals with kidney disease will die.

**Here are some basic facts:**

- **Hemodialysis**—the use of an artificial kidney also known as a dialyzer to remove built up toxins and water from the blood
- **Peritoneal dialysis**—introduction of a cleansing solution into the abdomen to flush out toxins
- **Kidney transplant**—replacing the failed kidney with a donated one

### **Hemodialysis (HD)—Cleansing a patient’s blood of harmful toxins and excess fluids through use of an artificial kidney (dialyzer) and hemodialysis machine**

- Specially trained personnel, electricity and water (that has had all harmful substances such as chlorine, aluminum, fluoride, and bacteria removed) are required for treatment.

**There are different types of hemodialysis treatment. These types include:**

- **In-Center Hemodialysis**—This takes place at a dialysis facility at least 3 times a week for 3 - 4 hours.
- **Conventional Home Hemodialysis**—This treatment is similar to the treatment at a facility, but it is performed at home with the help of a care partner.
- **Short Daily Hemodialysis**—Patients do hemodialysis typically at home 5 - 6 times per week, but for a shorter amount of time (2 - 3 hours).
- **Nocturnal Dialysis**—Nocturnal dialysis can be performed at home or at a center (if available in your area). Typical treatment is 3-6 days a week for 7-8 hours while the patient is sleeping.

\*Please note that to perform dialysis at home usually requires a care partner who can help and monitor your treatment.

### **Peritoneal Dialysis (PD)—Cleaning the blood by placing a catheter into the peritoneal cavity surrounding the internal organs**

- The peritoneal membrane acts as a filter as the dialysate solution flows through the catheter and removes toxins from the blood where it is then drained and discarded.
- An average of 4-6 fluid exchanges are required each day or for 8 hours overnight.

**There are two types of peritoneal dialysis. Peritoneal dialysis is typically performed at home.**

- **Manual Exchange**—This method of treatment is performed manually 4-5 times through each day.
- **Continuous Cycling Peritoneal Dialysis (CCPD)**—This method of treatment requires a machine called a cyclor that performs fluid exchanges while the patient sleeps.

### **Kidney Transplantation—Replacement of a failed kidney with a kidney given from either a deceased or living donor**

- Specialized medications, or immunosuppressive drugs, are required to prevent the body’s rejection of the new kidney.
- Transplant recipients are at a high risk for infection due to their medication weakening the body’s ability to fight them off.

Treatment of end-stage renal disease will vary for each individual patient. Patients please note that it is always best to discuss each option with your nephrologist to determine which method treatment is right for you.

If you have chronic kidney disease, but are not yet on dialysis and you receive Medicare Part B insurance coverage you are eligible to receive up to six education sessions about your treatment options.