

Kidneys perform **crucial functions** within the body. When they fail there are only four treatment pathways available: **Hemodialysis** uses a dialyzer to act as an artificial kidney, **peritoneal dialysis** uses the body's own abdominal lining to filter wastes, a **transplant** comes from a living or deceased donor and **palliative care** is a strategy that aims to prevent stress and reduce pain at the end of life. Without hemodialysis, peritoneal dialysis or a transplant, individuals with failing kidneys will die.

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 ultra-purified water 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.
- **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). Typical treatment is 3-6 days a week for 8-10 hours while the patient is sleeping.

Peritoneal Dialysis (PD)— Cleaning the blood by using the body's abdominal membrane (peritoneum) as a filter to remove waste products.

- 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 and does not require the use of a machine.
- **Continuous Ambulatory Peritoneal Dialysis (CAPD):** This method of treatment requires a machine called a cycler that performs fluid exchanges while the patient sleeps.

Kidney Transplantation—Replacement of a failed organ 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 and family 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.