

ESRD Glossary

Abdomen	The part of the body containing the internal organs. Lies between the pelvis and the chest cavity.
Access	A means to get into the body. Accesses to the bloodstream for hemodialysis are fistulas, grafts, catheter, etc. Access to the peritoneal cavity for peritoneal dialysis is a catheter.
Acute	Rapidly developing; severe; short duration.
Acute Rejection	Acute rejection can happen any time after a kidney transplant. During acute rejection, the serum (blood) creatinine rises. Acute rejection can usually be treated with a higher dose or a different type of immunosuppressive drug until the creatinine returns to baseline.
Acute Kidney Failure	Sudden and severe decrease in kidney function that is short term.
Advance Directives	A document that outlines a patient's wishes for medical treatment in case he or she becomes too ill to make such decisions.
Ambulatory	Able to walk; movable.
Anemia	A condition in which there is a reduction of red blood cells.
Antibiotic	Medication used to kill bacteria and fight infection.
Anticoagulant	Medication that delays or stops the clotting of blood such as Coumadin (or heparin).
Antihypertensive	Medication that lowers blood pressure.
Antiseptic	Chemical that stops growth and reproduction of bacteria and viruses, but doesn't necessarily destroy them as a disinfectant would.
Arterial line	A tube that carries blood away from the body into the dialyzer.
Arteriosclerosis	Hardening of the arteries.
Artery	A blood vessel carrying blood away from the heart to other parts of the body
Artificial Kidney	A filtering device used with an artificial kidney machine to remove excess fluid and waste products from the body. Also known as "dialyzer" and "hemodialyzer."
Auscultate	Auscultate means to listen with a stethoscope.
Artificial Kidney Machine	A machine that supports and monitors the functioning of the artificial kidney (dialyzer). Also called "hemodialysis machine."
Bacteria	Single cell organisms, capable of rapid reproduction. They are present everywhere; some are harmless, others are known to produce infectious diseases.
Bath	See "dialysate."
Bladder	Any pouch or other flexible enclosure that can hold liquids or gasses but usually refers to the hollow organ in the lower abdomen that stores urine.
Blood Chemistries	Measurement of certain chemicals in the blood.
Blood Flow Rate	In dialysis, the rate at which the patient's blood is pumped through the

artificial kidney.

Blood Pressure	Pressure blood exerts on the walls of the blood vessels. This is expressed in two numbers, such as 120/80. The systolic (top) number is the pressure when the heart is contracting. The diastolic (bottom) number is the pressure when the heart is at rest.
Blood Pump	A pump that moves blood from the patient's access through the blood tubing, an artificial kidney, and back to the patient, without damage to the blood cells.
Brine	Concentrated saline solution. In dialysis water treatment, brine is used to flush the resin bed of a water softener.
Bruit	Sound produced by the blood flowing through a graft or fistula.
BUN (blood urea nitrogen)	Combination of waste products (nitrogen and urea) in the blood normally excreted by the kidneys.
Calcium	Element found in the body. Important to bone growth and formation, blood clotting, nerve and muscle functioning and the activation of certain enzymes.
Carbohydrates	Category of food that is easily used by the body for energy.
Carbon Tank	Carbon tanks are water treatment devices used to remove chlorine, chloramines, pesticides, industrial solvents and some trace organic substances from water used for dialysis.
Cardiac	Anything to do with the heart.
Catheter	A flexible, hollow tube through which fluids enter or leave the body. A catheter is implanted in the abdomen for peritoneal dialysis.
Chloramine	A mix of chlorine and ammonia, or chlorine and organic material. Chloramines in dialysis water can cause a serious condition called hemolysis (rupture of red blood cells).
Chronic	Of long duration or recurring often.
Chronic Rejection	This is a process that may happen after a kidney transplant. It can develop over months or even years. There is no known treatment.
Chronic Kidney Failure	Damage to the kidneys that cannot be reversed, usually progressive in nature.
Clearance	Rate that waste products in the blood are removed through dialysis expressed in milliliters/minute.
Coagulation	The process of forming a blood clot.
Concentration	The amount of solute dissolved in a measure of fluid.
Conductivity	The ability of a fluid to transfer electrical charge.
Congestive Heart Failure	A condition in which the body is fluid overloaded, causing the heart to pump less effectively. Congestive heart failure may result in excess fluid in the lungs.
Contaminate	Allowing microorganisms to contact a sterile area, making it unsterile and creating potential for infection.
Continuous	A form of dialysis in which dialysate drains into and out of the peritoneal

Ambulatory Peritoneal Dialysis (CAPD)	cavity by gravity several times a day.
Continuous Cycling Peritoneal Dialysis (CCPD)	A form of dialysis that uses a cycling machine to infuse and drain dialysate from the peritoneal cavity several times during the night while the patient sleeps.
Convulsion	Involuntary muscle contractions and relaxation.
Creatinine	One of the many waste products in the blood produced by normal tissue breakdown and removed by the kidneys, or by dialysis in patients with renal failure.
Cross-Matching	Testing of blood and tissues to check compatibility of donor kidney and patient for kidney transplantation.
Culture	A sample of organisms taken from a site to identify the specific organism causing infection.
Dialysate	Solution containing water and chemicals (electrolytes) that passes through the artificial kidney to remove excess fluids and wastes from the blood, also call "bath."
Dialysis	Cleansing the body of unwanted toxins, waste products and excess fluid by filtering them from the blood through a semipermeable membrane.
Dialysate Flow Rate	Rate at which dialysate flows through the dialyzer.
Dialyzer	See "artificial kidney".
Diffusion	Passage of particles from an area of high concentration to a solution of low concentration resulting in an even distribution of particles.
Disinfectant	An agent which will kill most microorganisms (bacteria, viruses) it contacts.
Dry Weight	The weight of a dialysis patient when excess fluid has been removed. Also known as "ideal weight".
Dwell Time	Length of time dialysis solution stays in the peritoneal cavity during peritoneal dialysis.
Edema	Swelling or puffiness due to buildup of excess fluid in the tissues most noticeable in ankles, hands and face. Occurs in dialysis patients as a result of excess fluid intake or decreased ultrafiltration.
Endotoxin	A toxic part of the cell walls of some bacteria.
End-Stage-Renal Disease (ESRD)	Stage of kidney damage that requires dialysis or kidney transplantation to maintain life. Another term for permanent kidney failure.
Exchange	The process of changing used dialysate for fresh solution in peritoneal dialysis.
Exit Site	The area where the needles enter or exit through the access. Also, where a peritoneal dialysis catheter or subclavian catheter exits the skin.
Feed Water	Feed water is untreated tap water before it passes through a water treatment system. Feed water must pass through all of the components of a water treatment system before it is used for dialysis.
Fistula	The surgical joining of an artery and a vein so that the vein enlarges due to the flow of arterial blood. A fistula is a type of access, also known as an

arteriovenous fistula.

Fluid Overload	Point at which extra fluid in the body causes edema, difficulty in breathing or extra strain on the heart.
Glomerulonephritis	Inflammation of the kidney's filters (glomeruli).
Glucose	A type of sugar found in the blood.
Graft	In dialysis, surgical placement of a material between an artery and vein to create a circulatory access for hemodialysis. Graft also refers to a transplanted kidney.
Hematocrit	Ration of red blood cells to whole blood.
Hemodialysis	Removal of excess fluids and waste products by passage of blood through an artificial kidney.
Hemodialysis Adequacy	The measurement of the dialysis dose to ensure that patients receive at least the minimum amount of treatment needed for survival. KDOQI Guidelines recommend a minimum delivered Kt/V of 1.2 or a minimum delivered URR of about 65%.
Hemodialyzer	See "artificial kidney".
Hemoglobin	Red, protein portion of the red blood cell which carries oxygen from lungs to body tissues.
Heparin	An anticoagulant given in hemodialysis to slow clotting time so that blood will not clot in the lines or dialyzer.
Hepatitis	Inflammation of the liver caused by virus, bacteria, toxic agents or medication.
Hepatitis B surface antigen	Substance that indicates infection with hepatitis B. Testing for this antigen is performed frequently on clinic staff and patients.
Hypertension	High blood pressure.
Hypotension	Low blood pressure.
Immunosuppressive Drug	Type of medication that suppresses the body's immune response. Given to transplant recipients to help prevent rejection of the transplanted kidney.
Infection	Invasion of the body by disease - producing organisms and the reaction of the tissues to their presence.
Inflammation	Localized heat, redness, swelling and pain; usually as a result of infection or irritation.
Intravenous	Within a vein.
Kt/V	Clearance X time / volume. Measure that indicates how well waste products have been removed by dialysis treatment.
Kidneys	Two bean-shaped organs located at the back of the abdominal cavity, one on each side of the spinal column. Kidneys maintain the body's chemical balance by excreting waste products and excess fluid in the form of urine.
Kilogram	1,000 grams, one kilogram equals 2.2 pounds.
Liter	The basic unit of volume measurement in metric system, approximately equal to one quart.

Membrane	Thin layer of tissue or material, usually an outer layer or lining of organs or group of organs.
Metabolism	Physical and chemical changes occurring within the body in order to produce energy.
Minerals	Inorganic substances necessary to normal body function, but toxic in high concentrations.
Monitor	(noun) Electronic device used to check, remind, or warn.(verb) Watching patients during their treatments, or checking the adequacy of treatments over time.
Nausea	Upset stomach.
Nephrectomy	Surgical removal of the kidney.
Nephrologist	Doctor specializing in kidney disorders.
Nephron	Unit of kidney which maintains the body's chemical balance. There are approximately one million nephrons in each kidney. The basic structural and functional unit of the kidney.
Neuropathy	Any disease of the nerves.
Nocturnal Hemodialysis	Hemodialysis done at night while sleeping.
Osmosis	Movement of fluid through a semipermeable membrane to achieve equal concentration on both sides of the membrane.
Palpitation	Irregular beating of the heart.
Parathyroid Glands	Small glands located in the neck which produce a hormone that regulates calcium and phosphorus levels in the blood.
Parathyroidectomy	Surgical removal of the parathyroid glands. Can be partial or complete.
Pathogens	A pathogen is an agent (such as bacteria) that causes disease in humans.
Pericarditis	Inflammation of the pericardium, the sac-like structure surrounding the heart.
PD Plus	A combination of CCPD and CAPD mostly used by PD patients who need more dialysis.
Peritoneal Cavity	Space surrounding the abdominal organs located under the abdominal muscles.
Peritoneal Dialysis	A form of dialysis in which the lining of the abdomen, the peritoneal membrane, acts as a natural filter.
Peritoneum (or peritoneal membrane)	Smooth, semipermeable membrane that covers the abdominal organs and lines the abdominal cavity.
Peritonitis	Infection of the peritoneal cavity that must be treated by a doctor.
Phosphate Binders	Medications that bind with dietary phosphorus so that it may be eliminated from the body; helps keep calcium and phosphorus in balance for dialysis patients.
Phosphorus	An element necessary for normal body functions, especially bone formation.

Polycystic Kidney Disease	Hereditary disease involving growth of cysts on kidney tissue.
Potassium	An element needed by the body for normal muscle and nerve function and cell maintenance.
Product Water	Product water has been forced through a reverse osmosis membrane.
Protein	Group of nitrogen containing compounds found in the body which are essential to life.
Pruritus	Itching.
Pulse	Throbbing sensation felt in the arteries in time with the heartbeat.
Red Blood Cell	Type of blood cell containing hemoglobin which carries oxygen to the tissues.
Renal	Referring to the kidneys.
Semipermeable Membrane	Material that allows only fluids and small particles to flow through.
Sodium	Element found in the body that helps regulate the body's fluid content.
Sterile	Totally free from any living microorganisms.
Thrill	Pulsation (vibration or buzzing) felt over the graft or fistula.
Tissue Typing	Matching the blood cells of potential transplant recipients with donors.
Toxin	Waste product in the blood or any substance that is poisonous.
URR	Urea reduction ratio. Percentage based on how much blood urea nitrogen (BUN) was removed during a dialysis treatment. Indicates how effectively urea and other waste products have been removed.
Ultrafiltration	Process used to remove excess fluid from the blood during dialysis.
Urea	Nitrogenous waste product formed during the breakdown of protein in the body.
Uremia	Buildup of waste products in the blood due to the inability of the kidneys to excrete them.
Ureter	A tube that carries urine down from the kidney to the bladder.
Urethra	The transport tube leading from the bladder to discharge urine outside the body. In males, the urethra travels through the penis and carries semen as well as urine. In females, the urethra is shorter than in the male and emerges above the vaginal opening.
Urinary Tract	The organs of the body that produce and discharge urine. These include the kidneys, ureters, bladder and urethra.
Vascular	Pertaining to blood vessels.
Vein	Blood vessel that carries blood from the parts of the body back to the heart.
Venous	Referring to veins and the flow of blood to the heart.
Venous Line	Tube that carries blood from the dialyzer back to the body.
Waste Products	Substances formed from the breakdown of protein in foods and from normal

muscle tissue.

White Blood Cell

Type of blood cell that fights infection in the body.
