Introduction to Medical Terminology
Chapter 9 The Urinary System
Functions of the Urinary System

• Elimination of waste products
  – Toxins
  – Drugs

• Regulate aspects of homeostasis
  – Water balance
  – Electrolytes
  – Acid-base balance in the blood
  – Blood pressure
Organs of the Urinary system

- Kidneys (2)
- Ureters (2)
- Urinary bladder (1)
- Urethra (1)
- **Renal cortex** – outer region
- **Renal medulla** – inside the cortex
- **Renal pelvis** – inner collecting tube
Nephrons

- The filtering units of the kidneys
- Responsible for forming urine
- Main structures of the nephrons:
  - Glomerulus
  - Renal tubule
• Each nephron contains a glomerulus
• A specialized capillary bed
• Surrounded by a membrane called the Bowman’s capsule
Common Disorders of the Urinary System

Uremia

- Also known as uremic poisoning
- A toxic condition caused by excessive amounts of urea and other waste products in the bloodstream
Ureteralgia

• Pain in the ureter(s)
• Often caused by a stone, also known as a calculus, in the ureter
Pyelonephritis

An inflammation of the renal pelvis and of the kidney
Cystolith

A calculus in the urinary bladder
Dysuria

- Difficult or painful urination
- Can result from infection, calculi or injury
Enuresis

- The involuntary discharge of urine
- When it occurs during sleep, it is also known as nocturnal enuresis or "bedwetting"
Diuresis

The increased excretion of urine
KUB

- A radiographic study of the kidneys, ureters and bladder
- Also known as a flat-plate of the abdomen
Nephropexy

The surgical fixation of a floating kidney