

# Component 3-Terminology in Healthcare and Public Health Settings

Unit 12-Urinary System

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## **Urinary System Objectives**

- Define, understand and correctly pronounce medical terms related to the urinary system
- Describe the following related to the urinary system
  - common diseases and conditions
  - laboratory and diagnostic procedures
  - medical and surgical procedures
  - medications

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# **Urinary System Anatomy**

- Urinary System
  - Kidneys
  - Ureters
  - Urinary Bladder
  - Urethra



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### Kidneys

- Functions
  - Elimination of organic waste
  - Regulation of
    - Homeostasis
    - Acid-base balance
    - Red blood cell production
    - Blood pressure
  - Elimination of toxic substances

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### Diseases and Disorders of the **Urinary System**

- Bladder Diseases
  - Cystitis
  - Urinary tract infection
  - Urinary incontinenceInterstitial cystitis
- Diagnostic Tests
  - Ürine tests
  - X-rays
  - Cystoscopy
- Treatment

   Medications
  - Surgery

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### Diseases and Disorders of the **Urinary System**

- Bladder Cancer
  - Location
    - · Lining of the bladder
  - Sixth most common type of cancer in US
  - Risk Factors
  - Symptoms
  - Treatment
    - Surgery Radiation
    - Chemotherapy
    - Biologic Therapy (immunotherapy)

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# Diseases and Disorders of the Kidney · Kidney stones - Also called nephrolithiasis - Symptoms • Back or side pain that won't go away • Blood in the urine Fever and chills Vomiting • Urine that smells bad or looks cloudy • Burning pain when urinating Health IT Workforce Curriculum Version 2.0/Spring 2011 Diseases and Disorders of the Kidney · Kidney stones - Also called nephrolithiasis - Symptoms - Diagnostic tests • Intravenous pyelogram - Treatment Lithotripsy - Extracorporeal shock wave lithotripsy (ESWL) Health IT Workforce Curriculum Version 2.0/Spring 2011 Component 3/ Unit 12 Disorders and Diseases of the Kidney Kidney Damage - Risk Factors • Diabetes (Diabetic nephropathy) • High blood pressure • Family history of disease Kidney Failure

- Renal failure

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- End-stage renal disease (ESRD)

## Disorders and Diseases of the Kidney • Treatment for Renal Failure - Dialysis • Hemodialysis • Peritoneal dialysis - Kidney Transplantation • Most common transplants • Sources of transplants - Living related donor - Living unrelated donor - Deceased donor Disorders and Disease of the Kidney • Wilms Tumor Nephroblastoma Affects children Curable Symptoms - Lump in the abdomen - Blood in the urine • Treatment SurgeryChemotherapy Radiation - Biologic therapy Health IT Workforce Curriculum Version 2.0/Spring 2011 Component 3/ Unit 12 Disorders and Disease of the Kidney Renal Cancer - Location - Risk Factors - Symptoms • Blood in the urine • Lump in the abdomen • Unexplained weight loss • Side pain · Loss of appetite Health IT Workforce Curriculum Version 2.0/Spring 2011 Component 3/ Unit 12

### Disorders and Disease of the Kidney

- Renal Cancer
  - Location
  - Risk Factors
  - Symptoms
  - Treatment
    - Surgery
    - Radiation
    - Chemotherapy
    - Biologic Therapy

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# Urinary System Combining Forms

Word Part Meaning **Key Terms** Cyst/o bladder cystoscopy Lith/o stone lithotripsy Meat/o meatus meatotomy Nephr/o kidney nephritis Ren/o renal renography Ureter/o ureter ureterectomy urethritis Urethr/o urethra Component 3/ Unit 12 Health IT Workforce Curriculum Version 2.0/Spring 2011

### Unit 12

Tell me, Detective . . . .

An elderly white male presented to his family practitioner complaining of blood in his urine. After evaluation and testing, he was diagnosed with bladder cancer. What are the therapies or treatments the family practitioner should discuss with the patient?



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