



Faculty of Applied Science
Medical Technical Radiology
Radiographic and Medical
Terminology II
(MTR110)

Lecture 5-6

URINARY SYSTEM AND RESPIRATORY SYSTEM TERMINOLOGY

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Outline

What is Urinary system

Common Prefixes and suffixes related to urinary system

Essential Urinary System Medical Terms

Common Prefixes related to urinary system

Class activity

References



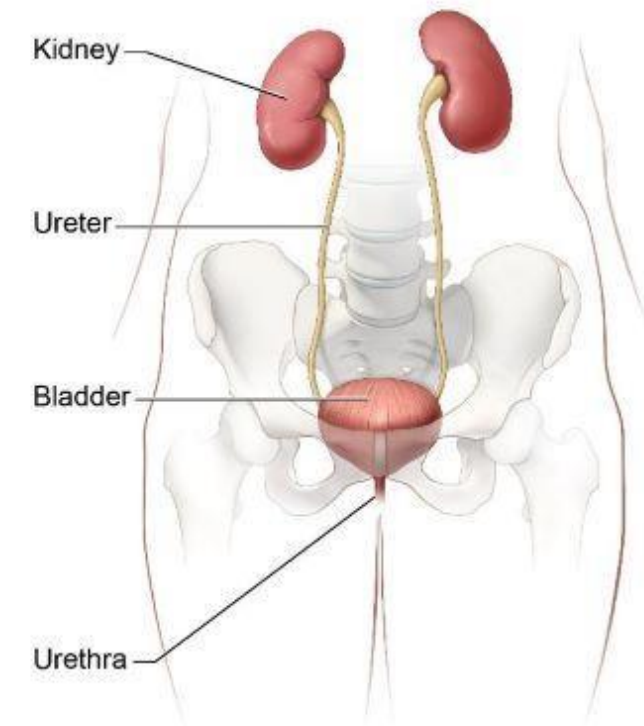


Learning outcomes

- By the end of this lesson, students will be able to:
 1. Define the endocrine system and its functions.
 2. Identify major endocrine glands.
 3. Understand common endocrine terminology.
 4. Recognize hormones and their functions.
 5. Apply terminology in medical and laboratory settings.

What is Urinary system

- The **urinary system** is responsible for filtering blood, removing metabolic waste products, regulating water and electrolyte balance, maintaining acid-base balance, and producing urine. It consists of:
 - Kidneys
 - Ureters
 - Urinary bladder
 - Urethra



Common Prefixes Related to the Urinary System



Prefixes	Meaning
a-:	Absence of, without
an-:	Absence of, without
dia-:	Through, complete
dys-:	Painful, abnormal, difficult, labored
poly-:	Many, much



Common Root word related to urinary system

Root word	Meaning	Example
nephr/o	Kidney	Nephrology
ren/o	Kidney	Renal artery
cyst/o	Bladder	Cystitis
ureter/o	Ureter	Ureteroscopy
urethr/o	Urethra	Urethritis
lith/o	Stone	Lithotripsy
urin/o	Urine	Urinalysis

Common Suffixes related to urinary system



Suffix	Meaning	Example
-itis	Inflammation	Cystitis
-ectomy	Surgical removal	Nephrectomy
-algia	Pain	Nephralgia
-emia	Blood condition	Uremia
-osis	Abnormal condition	Nephrosis
-uria	Urine condition	Hematuria
-scopy	Visual examination	Cystoscopy
-megaly	Enlargement	Nephromegaly

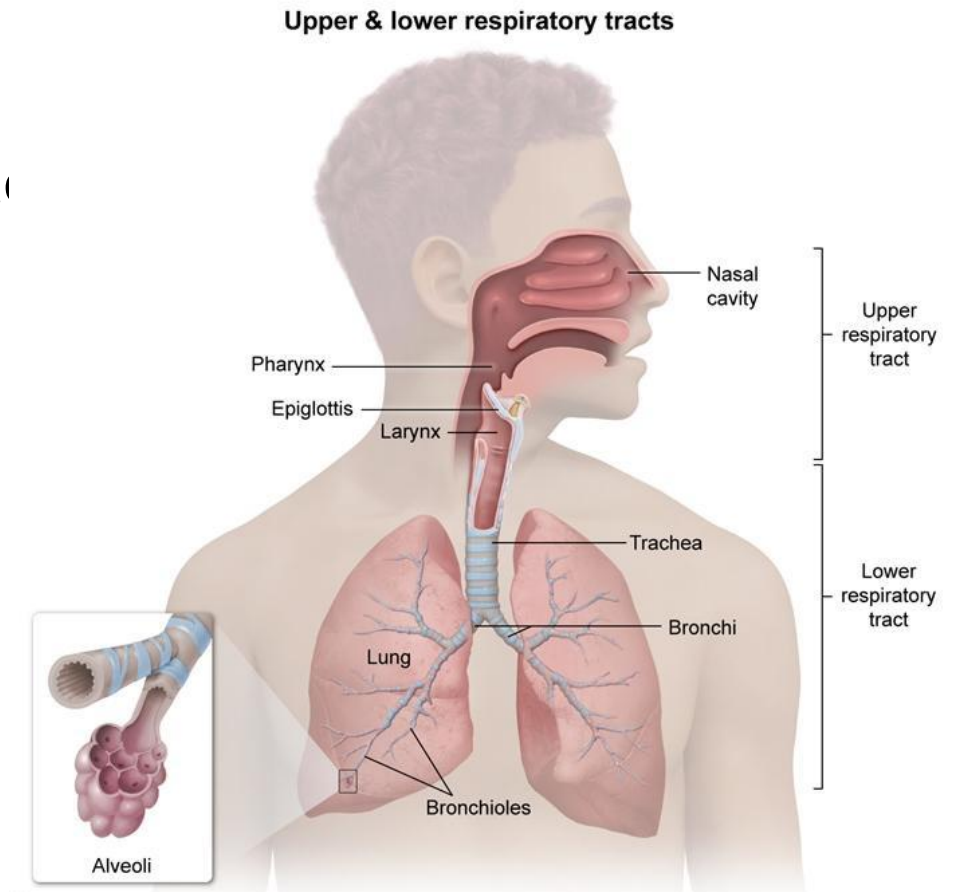
Essential Urinary System Medical Terms



Medical Term	Breakdown	Meaning
Nephrology	nephr/o + logy	Study of kidneys
Nephrectomy	nephr/o + ectomy	Removal of kidney
Cystitis	cyst + itis	Bladder inflammation
Hematuria	hemat + uria	Blood in urine
Dysuria	dys + uria	Painful urination
Polyuria	poly + uria	Excessive urination
Oliguria	oligo + uria	Reduced urine output
Anuria	an + uria	Absence of urine
Lithotripsy	lith/o + tripsy	Crushing urinary stones

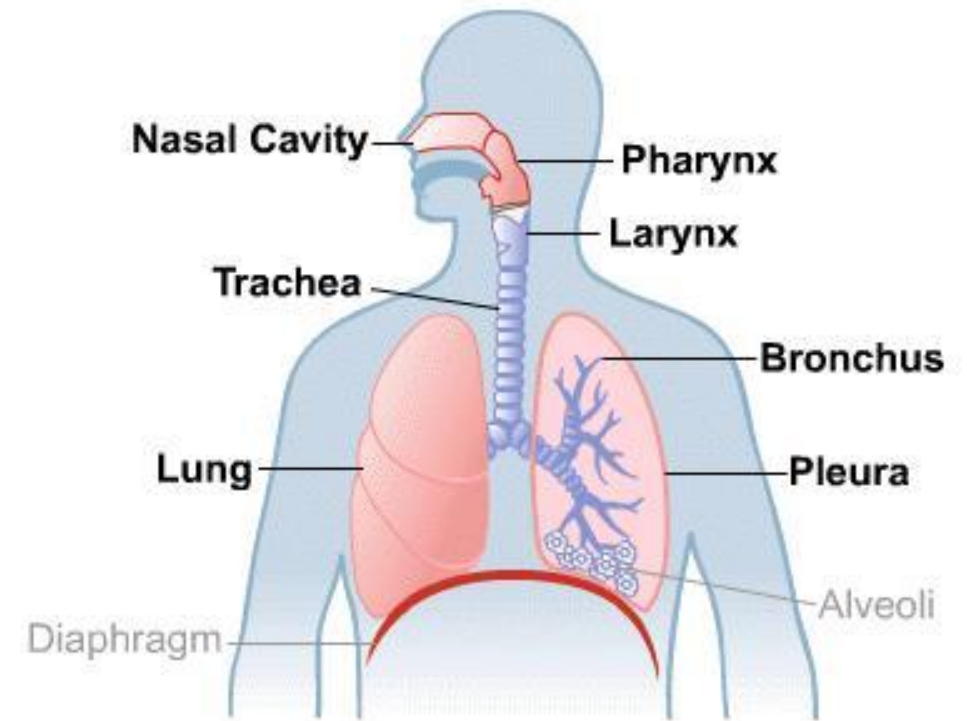
What is respiratory system

- The **respiratory system** is the network of organs and tissues that allow human to breathe responsible for:
 - Gas exchange (oxygen and carbon dioxide)
 - Maintaining blood pH
 - Voice production
 - Olfaction (sense of smell)



Major Organs

- Its major organs include:
 - Nose
 - Pharynx
 - Larynx
 - Trachea
 - Bronchi
 - Lungs
 - Pleura



Root word related to respiratory system



Root	Meaning
nephr/o	Kidney
ren/o	Kidney
cyst/o	Bladder
lith/o	Stone
pneum/o	Lung
pulmon/o	Lung
bronch/o	Bronchus
trache/o	Trachea
laryng/o	Larynx
pharyng/o	Pharynx
rhin/o	Nose

Common Suffixes related to respiratory system

Suffix	Meaning	Example
-itis	Inflammation	Bronchitis
-ectomy	Removal	Lobectomy
-plasty	Surgical repair	Rhinoplasty
-scopy	Visual examination	Bronchoscopy
-spasm	Involuntary contraction	Bronchospasm
-pnea	Breathing	Tachypnea
-oxia	Oxygen level	Hypoxia
-oma	Tumor	Adenoma

Respiratory System Medical Terms



Medical Term	Breakdown	Meaning
Bronchitis	bronch + itis	Inflammation of bronchi
Pneumonia	pneumon + ia	Lung infection
Laryngitis	laryng + itis	Larynx inflammation
Pharyngitis	pharyng + itis	Throat inflammation
Tracheostomy	trache/o + stomy	Surgical opening in trachea
Bronchoscopy	bronch/o + scopy	Examination of bronchi
Tachypnea	tachy + pnea	Rapid breathing
Dyspnea	dys + pnea	Difficult breathing
Apnea	a + pnea	Absence of breathing
Hypoxia	hypo + oxia	Low oxygen level



References

- Ernstmeyer, K., & Christman, E. (Eds.). (2024). *Medical terminology* (2nd ed.). Open Resources for Nursing, Chippewa Valley Technical College.
- Nath, J. L. (2017). *Stedman's medical terminology* (2nd ed.). Wolters Kluwer.