

Respiratory Module Objectives - Revised 2019

Module Objective	With respect to the following systems/processes	School of Medicine Sub-competency	Disciplines
RES.A Recognize the normal structures and explain the function of the respiratory system.	Mechanisms of respiration Gas transport Gas exchange Ventilation and perfusion Control of respiration Neonatal pulmonary transition	2.1.1 Demonstrate knowledge of the normal structure, metabolism, and function of the molecules that compose the human body. 2.1.2 Demonstrate knowledge of normal cellular structure and function of the human body 2.1.4 Demonstrate knowledge of normal structure and function of human organ systems. 2.1.5 Demonstrate knowledge of the mechanisms that maintain homeostasis	Anatomy Biochemistry Histology Physiology Pathology
RES.B Construct a framework for understanding common diseases and disorders of the respiratory system that incorporates epidemiology, pathogenesis, and pathophysiology.	Pulmonary edema Hypoxemia and acute respiratory failure Acute lung injury Upper airway obstructive disorders Obstructive lung diseases Interstitial lung diseases Pulmonary hypertension Venous thromboembolic disease Upper and Lower Respiratory Infections Pleural effusions Pneumothorax Pulmonary neoplasia	1.7.1 Demonstrate an understanding of economic factors that impact health 1.7.5 Demonstrate an understanding of environmental factors that impact health 1.7.6 Demonstrate an understanding of how lifestyle impacts health 2.2.1 Demonstrate knowledge of the abnormal structure, metabolism, and function of the molecules that compose the human body. 2.2.2 Demonstrate knowledge of abnormal cellular structure and function of the human body. 2.2.4 Demonstrate knowledge of abnormal structure and function of human organ systems. 2.2.5 Demonstrate knowledge of the mechanisms that disrupt homeostasis 2.6.1 List the epidemiologic factors that place a person or population at risk for a common condition or disorder	Microbiology Pathology Physiology Genetics Child Health Adult Medicine

		2.6.2 List the epidemiologic factors that affect transmission or development of a common condition or disorder.	
RES.C Synthesize biomedical information including clinical and laboratory data in order to diagnose common diseases and disorders of the respiratory system.	Pulmonary edema Hypoxemia and acute respiratory failure Acute lung injury Upper airway obstructive disorders Obstructive lung diseases Interstitial lung diseases Pulmonary hypertension Venous thromboembolic disease Upper and Lower Respiratory Infections Pleural effusions Pneumothorax Pulmonary neoplasia	2.3.1 Given a common condition or disorder, list the symptoms a patient might experience. 2.3.2 Given a common condition or disorder, list the findings that might be identified on physical exam. 2.3.3 Given a common condition or disorder, list the findings that might be identified on laboratory analysis. 3.4 Perform basic interpretation of commonly used diagnostic tests 3.6.2 Given a patient with a particular chief complaint, medical history, and physical exam findings, list an appropriate differential diagnosis. 3.6.3 Given a patient whose history and physical exam lead to particular differential diagnosis, list the initial studies that should be ordered, including laboratory, radiological and other studies or procedures 3.6.5 Utilize the information gained by history, physical exam, laboratory tests, radiology tests, and other studies or procedures to determine an appropriate diagnosis	Microbiology Adult Health Pathology Epidemiology Child Health Radiology Biochemistry Genetics Physiology
RES.D Employ prevention and treatment strategies for common diseases and disorders of the respiratory system.	Prevention and treatment strategies for diseases listed above Pharmacotherapeutic agents for treatment of obstructive respiratory disease including asthma and COPD • Mechanism of action • Clinical indications • Adverse effects Pharmacotherapeutic agents (antibiotics) for treatment of respiratory infections • Mechanism of action	2.4.1 Demonstrate knowledge of basic pharmacologic principles. 2.4.2 List the routine medications that might be used to manage a common condition or disorder 2.6.3 List the strategies to control and prevent a common condition or disorder	Pharmacology Adult Health Child health

	• Clinical indications • Adverse effects		
RES.E Apply the principles of relieving total pain as it pertains to patients with respiratory disorders.	Respiratory failure due to chronic respiratory disease, including COPD and end stage interstitial lung disease.	3.8.1 Demonstrate an understanding of the mechanisms of pain 3.8.2 Recognize the various manifestations of pain 3.8.3 Describe the principles of managing pain 3.8.4 Given a particular patient situation describe and explain appropriate pain management	Adult Health Ethics

