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Respiratory Medicine Blueprint

Academic Year 2022 - 2023

Fourth Year Respiratory Medicine Examination Blueprint

**Purpose of the exam**

The exam is designed to evaluate the knowledge, diagnostic reasoning, and clinical judgment skills expected of the certified junior doctor in the broad domain of Respiratory Medicine. The ability to make appropriate diagnostic and management decisions that have important consequences for patients will be assessed. The exam may require recognition of common as well as some rare clinical respiratory problems for which patients may consult a physician.

**Exam content**

Exam content is determined by a pre-established blueprint, or table of specifications. The blueprint is developed by Department of Medicine – College of Medicine – Al-Nahrain University and is reviewed annually and updated as needed for currency. Recent graduates, trainees, training program directors, and certified practitioners in the discipline are surveyed periodically to provide feedback and inform the blueprinting process.

The primary Respiratory content categories of the blueprint are shown below, with the percentage assigned to each for a typical exam:

|  |  |
| --- | --- |
| **Respiratory Content Category** | **% of Exam** |
| Asthma | 8% |
| COPD | 8% |
| Bronchiectasis | 3% |
| Diffuse Parenchymal Lung Diseases | 8% |
| Upper Airway diseases | 3% |
| Sleep Medicine | 3% |
| Critical Care Medicine | 8% |
| Lung Tumors | 6% |
| Pleural Effusion | 4% |
| Lower Respiratory tract infections | 8% |
| Health care associated infections | 8% |
| Lung diseases in immunosuppressed | 3% |
| Miscellaneous | 5% |
| Thoracic Surgery | 25% |
| Total | **100%** |

**Exam format**

The exam is composed of

1. The Midterm written exam which compromises 25% of the final mark

It is composed of 25 single-best-answer multiple-choice questions

1. Short Quizzes, essays, and other student-centered activities which compromise 5% of the final mark
2. The Final written exam which compromises 70% of the final mark

It is composed of up to 70 single-best-answer multiple-choice questions, and 4 grey cases.

Most questions describe patient scenarios and ask about the work done (that is, tasks performed) by physicians during practice:

* Making a diagnosis
* Ordering and interpreting results of tests
* Recommending treatment or other patient care
* Assessing risk, determining prognosis, and applying principles from epidemiologic studies
* Understanding the underlying pathophysiology of disease and basic science knowledge applicable to patient care

In all exams, clinical information presented may include patient photographs, radiographs, electrocardiograms, recordings of heart or lung sounds, and other media to illustrate relevant patient findings.

The primary medical categories can be expanded for additional detail to show topics that may be covered in the exam. Each primary medical content category is listed below, with the *percentage of the exam* assigned to this content area. Below each major category are subsection topics and their assigned percentages in the exam.

Please note: The percentages below describe content of a *typical* exam and are approximate; actual exam content may vary.

Upper Airway diseases **3%** of Exam

# Rhinitis, sinusitis, conjunctivitis

Allergic rhinitis

Acute and chronic sinusitis

Upper airway cough syndrome

# Upper respiratory tract infections

Common cold Pharyngitis Epiglottitis

Other upper respiratory tract infections (pertussis)

Respiratory tract infections **16%** of Exam

# Lower respiratory tract infections

Bronchitis Pneumonia Lung abscess and aspiration pneumonia

Tuberculosis (TB)

Infections of the pleural space and empyema

Pulmonary complications of HIV infection

**Nosocomial infections**

Infection control including isolation Hospital-acquired infections and prevention

# Prevention of infectious disease

Prevention of tuberculosis (TB)

# Specific causative organisms

Viral diseases

Chlamydial diseases Mycoplasmal diseases Bacterial diseases

Mycoses (fungal infections) Protozoan

**Asthma 8%** of Exam

Exercise- and cold-induced asthma Allergic bronchopulmonary aspergillosis Nasal polyps and aspirin sensitivity Occupational asthma

Asthma and pregnancy

Asthma mimics – (including vocal cord dysfunction) Undifferentiated asthma

Occupational asthma

**COPD 8%** of Exam

Chronic bronchitis and emphysema Other obstructive airway disease

Alpha-1-antitrypsin deficiency

# Occupational and environmental lung disease

Organic inhalations (hypersensitivity pneumonitis) Inorganic inhalations (pneumoconiosis)

**Diffuse Parenchymal Lung Diseases 8%** of Exam

# Restrictive lung disease other than interstitial lung and pleural disease

Pulmonary complications of obesity Chest wall disorders Neuromuscular disorders

Undifferentiated restrictive lung disease

# Interstitial lung disease

Idiopathic pulmonary fibrosis Sarcoidosis

Radiation pneumonitis

Drug-induced interstitial lung disease Connective tissue disorders and vasculitis Eosinophilic pneumonia

Anti-glomerular basement membrane (Goodpasture's) syndrome

**Pleural disease 4%** of Exam

Noninfectious pleural effusion

Infections of the pleural space and empyema Pneumothorax

**Bronchiectasis 3%** of Exam

# Bronchiectasis

**Congenital lung disease** Cystic fibrosis

**Critical Care Medicine 8%** of Exam

# Acute respiratory distress syndrome (ARDS)

# Respiratory Failure

# Oxygen delivery systems

**Lung Tumors 6%** of Exam

# Lung cancer

Paraneoplastic syndromes Undifferentiated lung cancer

# Solitary pulmonary nodule

**Sleep medicine 3%** of Exam

Obesity-hypoventilation syndrome Obstructive sleep apnea

**Pulmonary complications of Immunosuppression 8%** of Exam

HIV – Related lung diseases including pneumocystis

Undifferentiated lung diseases due to immunosuppression

**Miscellanous 5%** of Exam

**Evaluation of common pulmonary symptoms**

Cough Dyspnea Hemoptysis

**Interpretation PFT**

**Interpretation of ABG**

**Interpretation of radiological features**

**Smoking cessation**

**Thoracic Surgery 25%**

**25%** of Exam

**Each exam will cover all the indicated clinical tasks in the approximate percentages**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Clinical Task** | * **Pathophysiology** * **Etiology** * **Basic Knowledge** * **Epidemiology** * **Prognosis** * **Risk Factors** | * **Making Diagnosis** * **Evaluating symptoms and Signs** | * **Ordering Investigations** * **Interpreting Investigations** | * **Recommending Treatment** * **Evaluating treatment** |
|  | **20%** | **30%** | **25%** | **25%** |

**Questions will cover the following level of competences in the approximate percentages**

|  |  |  |  |
| --- | --- | --- | --- |
| **Level of Competence** | **Recall of Knowledge** | **Application of Knowledge** | **Problem solving** |
|  | **25%** | **40%** | **35%** |