### COMMON PRESENTATIONS AND CONDITIONS

Basic Trainees will require a sufficient depth of knowledge of these presentations and conditions.

- Acute coronary syndrome
- Acute heart failure
- Asthma
- Bronchiectasis
- Chest pain
- Chronic obstructive pulmonary disease
- Pleural effusion
- Pneumonia
- Primary lung malignancies
- Pulmonary embolus
- Respiratory failure:
  - acute
  - chronic

For all common presentations, Basic Trainees will need to know how to:

**Synthesise**
- incorporate epidemiology, pathophysiology and clinical science
- recognise the clinical presentation
- take a relevant clinical history
- conduct an appropriate examination
- establish a differential diagnosis
- plan and arrange appropriate investigations

**Manage**
- provide initial, evidence-based management
- discuss the principles of ongoing management
- apply quality use of medicines
- recognise potential complications of the disease and its management, and initiate preventative strategies
- refer appropriately

**Consider other factors**
- identify broader considerations and their impact on diagnosis and management

### LESS COMMON OR MORE COMPLEX PRESENTATIONS AND CONDITIONS

Basic Trainees will need to have an awareness of, and an understanding of appropriate resources that should be used to help manage patients with these presentations and conditions.

- Cystic fibrosis
- Interstitial lung disease
- Lung transplantation
- Pneumothorax
- Pulmonary hypertension:
  - primary
  - secondary
- Pulmonary metastases
- Pulmonary vasculitides
- Respiratory and sleep manifestations of systemic and chronic disease
- Sleep-disordered breathing such as, sleep apnoea and nocturnal hypoventilation
- Tuberculosis

For all less common and more complex presentations, Basic Trainees will need to know how to:

**Synthesise**
- incorporate epidemiology, pathophysiology and clinical science
- recognise the clinical presentation
- take a relevant clinical history
- conduct an appropriate examination
- establish a provisional diagnosis
- plan and arrange appropriate initial investigations

**Manage**
- initiate therapy in consultation
- discuss broad therapeutic options
<table>
<thead>
<tr>
<th><strong>EPIDEMIOLOGY, PATHOPHYSIOLOGY AND CLINICAL SCIENCE</strong></th>
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<td>Basic Trainees will be able to describe the principles of the foundational sciences.</td>
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- Anatomy of the lungs and airways
- Effects of inflammation of the airways and associated diseases
- Effects of occupational and environmental toxins such as cigarettes and asbestos on the respiratory system
- Importance of ventilation/perfusion ratio (V/Q) matching and the consequences of mismatched ventilation and perfusion
- Measurement of ventilation
- Mechanisms for acid–base balance
- Process of gas exchange

<table>
<thead>
<tr>
<th><strong>INVESTIGATIONS AND PROCEDURES</strong></th>
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<td>Basic Trainees will know how to select and interpret the results of these investigations and procedures.</td>
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- 6-minute walk test
- Arterial blood gases
- Basic pulmonary function tests such as spirometry, lung volumes, and diffusing capacity for carbon monoxide (DLCO)
- Bronchoscopy
- Cardiopulmonary exercise tests
- Diagnostic sleep studies
- Endobronchial ultrasound (EBUS)
- Imaging such as:
  - chest CT
  - chest X-ray (CXR)
  - chest ultrasound
  - CT pulmonary angiography (CTPA)
  - positron emission tomography (PET) scan
  - ventilation/perfusion (V/Q) scan
- Intercostal catheter insertion
- Pulse oximetry
- Spirometry at the bedside or in the consultation office
- Thoracentesis and pleural fluid aspiration
- Tissue biopsy including biopsies of pleura, lung parenchyma, and lymph nodes

<table>
<thead>
<tr>
<th><strong>IMPORTANT SPECIFIC ISSUES</strong></th>
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<td>Basic Trainees will be able to identify important specialty-specific issues and their impact on diagnosis and management.</td>
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- Broader public health implications related to the investigation and management of respiratory infectious diseases such as tuberculosis, Legionnaires’ disease, and pertussis
- Effects of aging on the respiratory system
- Effects of common comorbid conditions such as obesity and metabolic syndrome on the respiratory system
- Effects of environmental toxins such as cigarettes and asbestos on the respiratory system
- Effects of interactions between the pulmonary circulation and systemic circulation / cardiac function
- Effects of pregnancy on the respiratory system
LEARNING METHODS
Suggested opportunities, activities, and resources to assist with learning.

- Effects of sleep-disordered breathing on the respiratory system and cardio-respiratory control
- Clinical experience with respiratory medicine patients in a range of settings
  - Attend and/or observe:
    » fibreoptic bronchoscopy and endobronchial ultrasound (EBUS) procedures
    » performance of thoracentesis and insertion of intercostal catheter
    » the setup of a diagnostic and treatment sleep study
    » the steps involved in the introduction of continuous positive airway pressure (CPAP) and non-invasive ventilation (NIV) devices in the acute and chronic setting
  - Attend pulmonary function laboratory to observe:
    » cardiopulmonary exercise testing
    » challenge testing
    » eucapnic voluntary hyperpnoea (EVH) studies
    » lung function testing