



# Physical signs of Pulmonary Abnormalities

**Table 4-5** Physical Signs of Pulmonary Abnormalities

Abnormality	Initial impression	Inspection	Palpation	Percussion	Auscultation	Possible Causes
Acute airway obstruction	Appears acutely ill	Use of accessory muscles	Reduced expansion	Increased resonance	Expiratory wheezing	Asthma, bronchitis
Chronic airway obstruction	Appears chronically ill	Increased anteroposterior diameter, use of accessory muscles	Reduced expansion	Increased resonance	Diffuse reduction in breath sounds; early inspiratory crackles	Chronic bronchitis, emphysema
Consolidation	May appear acutely ill	Inspiratory lag	Increased fremitus	Dull note	Bronchial breath sounds; crackles	Pneumonia, tumor
Pneumothorax	May appear acutely ill	Unilateral expansion	Decreased fremitus	Increased resonance	Absent breath sounds	Rib fracture, open wound
Pleural effusion	May appear acutely ill	Unilateral expansion	Absent fremitus	Dull note	Absent breath sounds	Congestive heart failure
Local bronchial obstruction	Appears acutely ill	Unilateral expansion	Absent fremitus	Dull note	Absent breath sounds	Mucous plug
Diffuse interstitial fibrosis	Often normal	Rapid shallow breathing	Often normal; increased fremitus	Slight decrease in resonance	Late inspiratory crackles	Chronic exposure to inorganic dust
Acute upper airway obstruction	Appears acutely ill	Labored breathing	Often normal	Often normal	Inspiratory/ expiratory stridor	Epiglottitis, croup, foreign body aspiration