

CHEST PAIN (includes Noncardiac)

Target Population: Adult

Chest Pain (includes Noncardiac)		
Potential Cause	Signs and Symptoms	Risk Factors
Acute Coronary Syndrome (Unstable Angina, Non-ST-Elevation Myocardial Infarction, ST-Elevation Myocardial Infarction)	<ul style="list-style-type: none"> decreased exercise tolerance diaphoresis fatigue indigestion, nausea, vomiting intense substernal aching, burning, squeezing, heaviness, pressure pain may radiate to jaw, neck, epigastrium, shoulder, down arms and back shortness of breath syncope weakness (most common in women, diabetic and geriatric patients) 	<ul style="list-style-type: none"> cocaine and methamphetamine use positive family history presence of cardiac risk factors, such as smoking, obesity, inactivity, hypertension or dyslipidemia previous myocardial infarction, angina, revascularization uncommon before 40 years of age in men and 50 years of age in women
Anxiety Disorder	<ul style="list-style-type: none"> anorexia anxious appearance dyspnea fatigue hyperventilation vague, diffuse pain in upper chest 	<ul style="list-style-type: none"> recent major stressor or loss history of behavioral health condition
Shingles	<ul style="list-style-type: none"> located unilaterally along a dermatomal pattern pain described as burning, throbbing or stabbing pain typically presents before crusty lesions appear 	<ul style="list-style-type: none"> immunocompromised status reactivation of latent Varicella zoster virus
Acute Aortic Syndrome (Aortic Dissection, Intramural Hemorrhage, Penetrating Atherosclerotic Ulcer)	<ul style="list-style-type: none"> blood pressure difference between right and left arms diaphoresis dysphagia dyspnea orthopnea pain may radiate to abdomen, neck, back pallor peripheral cyanosis sudden onset of severe, tearing pain in center of chest 	<ul style="list-style-type: none"> known aortic aneurysm, congenital heart disease, connective tissue disorder, hypertension men over 40 years of age with hypertension men younger than 40 years of age with Marfan syndrome or bicuspid aortic valve previous cardiac procedure or surgery stimulant drug use, such as cocaine, methamphetamine
Gastroesophageal and Gastrointestinal Disorder (Gastroesophageal Reflux Disease, Esophageal Spasm, Hiatal Hernia)	<ul style="list-style-type: none"> discomfort may radiate to neck, ear, jaw or lower abdomen dysphagia, aspiration or heartburn pain can last minutes to days pressure sensation, squeezing or burning pain in chest; may be severe <p>Note: Presence of diaphoresis in the elderly may signify ischemic etiology.</p>	<ul style="list-style-type: none"> medications obesity pregnancy tobacco use triggers, such as exercise, food (large or spicy meals, acidic food), ethanol intake
Mitral Valve Prolapse	<ul style="list-style-type: none"> apical click dizziness dull, aching pain (may also be sharp) dyspnea pain is not retrosternal palpitations systolic murmur 	<ul style="list-style-type: none"> connective tissue disorder history of acute rheumatic valvulitis, acute or subacute bacterial endocarditis or myocardial ischemia or infarction

Potential Cause	Signs and Symptoms	Risk Factors
Musculoskeletal (Costochondritis or Muscle Strain)	<ul style="list-style-type: none"> no improvement with rest; lasts longer than angina pain pain is intermittent and reproducible pain with muscle movement and palpation sharp pain on inspiration; may radiate to arms or shoulders 	<ul style="list-style-type: none"> chest wall trauma, rib fracture excessive coughing recent muscle overuse
Pericarditis	<ul style="list-style-type: none"> chills cough diaphoresis dyspnea dysrhythmia fever paradoxical pulse over 10 mmHg pericardial friction rub (best heard at sternal border); increases when patient leans forward sharp pain on inspiration and with coughing tachycardia 	<ul style="list-style-type: none"> comorbidity, such as systemic lupus erythematosus, rheumatoid arthritis, ankylosing spondylitis history of metastatic disease, such as breast, lung or Hodgkin lymphoma previous myocardial infarction previous trauma recent infection
Pleurisy	<ul style="list-style-type: none"> associated symptoms: <ul style="list-style-type: none"> chills cough crackles or wheezing dyspnea fever hypoxemia malaise myalgia tachypnea chest pain especially on inspiration or deep breath; worsens with cough or sneeze 	<ul style="list-style-type: none"> history of pulmonary embolism, pleural effusion, lung cancer, pneumonia, tuberculosis, pericarditis or pneumothorax musculoskeletal trauma viral infection
Pneumothorax, Pneumomediastinum	<ul style="list-style-type: none"> asymmetrical chest movement breath sounds decreased on affected side diaphoresis dyspnea, increased work of breathing hemoptysis palpitations, irregular heart beat pleuritic chest pain subcutaneous emphysema <p><u>Tension pneumothorax:</u></p> <ul style="list-style-type: none"> hypotension neck vein distension tracheal deviation weak, rapid pulse 	<ul style="list-style-type: none"> chronic lung disease immobility malignancy previous surgical procedure previous trauma spinal cord injury
Pulmonary Embolism	<ul style="list-style-type: none"> anxiety, apprehension breath sounds altered cyanosis diaphoresis dysrhythmia hemoptysis hypotension pleuritic chest pain (may be lateralized) productive cough rapid onset dyspnea respiratory rate increased syncope 	<ul style="list-style-type: none"> history of deep vein thrombosis or pulmonary embolism immobility malignancy oral contraceptive use pregnancy recent surgery