

Table 1: Detailed List of the Causes of Non-Traumatic Chest Pain

Cardiac (Heart) Related			Non-Cardiac (Non-Heart) Related			
Ischemic	Non-Ischemic	Gastrointestinal	Pulmonary	Musculoskeletal	Psychological	Others
Acute Coronary Syndrome (ACS): This describes conditions that involve a sudden reduction in blood flow to the heart (commonly referred to as "heart attack"). It often leads to severe chest pain.	Pericarditis: Inflammation of the pericardium (sac-like tissue lining the heart), causing sharp chest pain that worsens when lying down and improves when sitting up.	Gastroesophageal Reflux Disease (GERD): This is when stomach acid flows back into the food pipe (oesophagus), irritating it and causing a burning chest pain known as heartburn.	Pulmonary Tuberculosis: An infectious disease commonly known as TB. It is caused by a bacterial infection in the lungs and marked by persistent cough, chest pain, night sweats, fatigue, and unexplained weight loss.	Costochondritis: Inflammation of the cartilage that connects the ribs to the breastbone, causing sharp or aching chest pain that gets worse with movement, deep breaths, or pressing on the chest.	Pain Disorders: In this condition, the brain misinterprets normal signals (e.g., touch) and creates real pain even though tests might not show a clear physical cause. This type of pain disorder is called allodynia.	Acute chest syndrome: A dangerous sickle cell complication where misshapen red blood cells obstruct blood flow in the lungs. It brings on sudden chest pain, fever, coughing, and breathing problems. It is a medical emergency.
Unstable Angina: Unexpected chest pain at rest. It is a serious condition that may signal an impending heart attack.	Myocarditis: Inflammation of the heart muscle, which can cause tiredness, chest pain, shortness of breath, and heartbeat problems.	Peptic Ulcer: Sores in the stomach or the first part of the small intestine, causing burning pain that sometimes radiates to the chest.	Pneumonia: A lung infection that inflames the air sacs of one or both lungs. This can be caused by different organisms, including bacteria, viruses and fungi. It usually comes with fever, cough, chest pain, and difficulty breathing.	Fibromyalgia: A chronic condition that causes widespread muscle pain, tiredness, and poor sleep.	Panic Disorder: Sudden, intense fear that causes sharp chest pain, which often feels like a heart attack.	Zoster infection (Shingles): Shingles is a painful skin rash caused by the return of the virus that causes chickenpox. Before the rash appears, it can cause burning or stabbing pain on one side of the chest. The pain can linger even after the skin rash has cleared.
Chronic Stable Angina: Chest discomfort that happens during physical activity or stress when the heart doesn't receive sufficient oxygen-rich blood.	Aortic Dissection: A tear in the aorta (the big blood vessel that carries blood from the heart to the body), causing sudden, severe, tearing chest pain. It is life-threatening.	Functional Heartburn: This mimics acid reflux symptoms, but diagnostic tests reveal no acid-related damage. It may be that the nerves in the oesophagus are just overly sensitive.	Pleuritis (Pleurisy): When the tissue lining the lung (pleura) becomes inflamed, causing sharp chest pain that worsens with breathing, movement, or coughing. It often feels like a stabbing pain.	Tietze Syndrome: This is like costochondritis, but with visible swelling where the rib meets the breastbone.	Depression: Emotional stress, like depression, can cause physical symptoms like chest tightness or pressure.	Environmental and Occupational Exposures: Exposure to harmful substances like fumes and dust from mining activities can cause chest pain, which could be a symptom of a respiratory tract disease.
Aortic Stenosis: When the valve of the major vessel that carries blood out of the heart (aorta) narrows, forcing the heart to pump harder to push blood out.	Mitral Valve Prolapse: This occurs when the valve separating the left chambers of the heart does not shut well. It causes chest pain and sometimes a feeling of skipped heartbeats.	Oesophageal Motility Disorder: In this condition, the muscles of the oesophagus don't move food down properly, causing difficulty with swallowing and chest pain that can feel like pressure, tightness, or heartburn.	Pneumothorax: This happens when air leaks into the area between the lung and chest wall. The trapped air compresses the lung, causing it not to inflate fully. This often causes quick, stabbing chest pain and breathing difficulty.	Slipping Rib Syndrome: Happens when the lower ribs (usually the 8th to 10th) become loose or hypermobile at the cartilage joint, allowing them to "slip" or move abnormally. This movement irritates the surrounding nerves and causes sharp or stabbing pain.	Anxiety: Anxiety triggers the body's stress response, leading to tight muscles, faster breathing, and a racing heart.	Substance use: Using certain drugs like cocaine, meth, or heavy alcohol can cause chest pain by affecting the heart, blood vessels, or causing muscle tension. It can even trigger heart attacks in some people.

Hypertrophic Cardiomyopathy: An inherited condition where the heart muscle becomes abnormally thick, making it harder for the heart to pump effectively.	Hypersensitive Oesophagus: Here, the oesophagus becomes extra sensitive so that even normal amounts of acid or movements can cause chest pain.	Pulmonary Hypertension: When blood pressure in the vessels of the lungs is high, forcing the heart to pump harder and causing fatigue, chest discomfort, and breathlessness, especially during movement.	Rheumatoid Arthritis: An autoimmune disease that causes inflammation of the joints, making them swollen, stiff and painful.	Cancer (Malignancy): Cancer in or near the chest (like lung or oesophageal cancer) can cause dull or constant chest pain, especially as it grows and presses on nearby structures or nerves.
	Schatzki Ring: A narrow ring of tissue near the lower oesophagus that can lead to swallowing problems, chest discomfort, or the sensation of food being stuck.	Bronchitis: When the lung's air passages (bronchi) swell, often due to an infection. It can cause wheezing or a cough that may produce mucus.	Psoriatic Arthritis: A type of arthritis linked to psoriasis (a skin condition), which can cause chest pain if joints near the ribs or sternum (breastbone) become inflamed.	Splenomegaly: An enlarged spleen (an organ just under the left ribs) can cause discomfort or pressure in the upper left chest or abdomen.
	Oesophageal Webs: Thin membranes that form in the upper part of the oesophagus, causing painful swallowing and chest discomfort.		Ankylosing Spondylitis: A form of arthritis that mainly affects the spine but can also cause chest pain due to stiffening or inflammation in the joints between the ribs and spine.	Nerve compression: When a nerve in the spine or chest area gets pinched or irritated, it can cause sharp, radiating chest pain that is made worse by movement or certain postures.
	Eosinophilic Esophagitis: An allergic reaction that makes the oesophagus swollen, leading to trouble swallowing, chest pain, and sometimes food getting stuck.		Degenerative Spinal Disorders: Wear-and-tear in the spine (like when the discs between the vertebrae degenerate) can pinch nerves and cause chest pain that often spreads from the back.	
	Mallory-Weiss Syndrome: Forceful vomiting or coughing that tears the lining of the oesophagus, causing chest pain and sometimes bleeding.		Radicular Pain: Pain caused by irritated or compressed nerves in the spine. It can feel like a sharp, burning, or shooting pain that travels along a nerve path and can affect different parts of the body, including the back, chest, neck, arms and legs.	
	Boerhaave Syndrome: A very serious condition where the oesophagus actually tears completely, often after severe vomiting.		Nonspecific Musculoskeletal Pain: Chest pain from muscles or joints without a clear cause, often related to poor posture, overuse, or stress on the chest wall.	

					Drug-Induced Oesophageal Ulcer: Ulcer caused by certain medications that irritate or burn the lining of the oesophagus.				
					Infectious Oesophagitis: Infection (often from viruses, fungi, or bacteria) of the oesophagus, leading to pain when swallowing and chest discomfort, especially in people with weak immune systems.				
					Biliary Colic: This occurs when a solid mass called a gallstone temporarily blocks the ducts that carry bile (a digestive juice) from the liver and gallbladder. The pain it causes comes in waves and often feels like pressure in the chest.				
					Cholecystitis: Happens when the gallbladder becomes inflamed, usually because the bile duct has been blocked for a long time.				
					Cholangitis: Inflammation of the bile ducts caused by gallstones or bacterial infection, leading to severe pain in the upper abdomen that can radiate to the chest. It may also cause fever and jaundice.				
					Pancreatitis: Inflammation of the pancreas, causing deep upper abdominal pain that can travel to the chest and back, often made worse by eating.				
					Hiatal Hernia: When part of the stomach pushes up into the chest through the diaphragm. It commonly leads to burning sensations in the chest, pain, and trouble swallowing.				