#### **Data Visualization**

## Average Age For Different Types Of Chest Pain In Existing Heart Diseases

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Team ID	PNT2022TMID14546	
Project Name	Visualizing and Predicting Heart Diseases	
	with an Interactive Dashboard.	

### What could cause chest pain?

Although chest pain can sometimes be a symptom of a heart problem, there are many other possible causes. While some of these are serious conditions, most are not harmful. Chest pain is the second biggest cause of emergency room (ER) visits in the United States, leading to over 8 millionTrusted Source ER visits every year. Worldwide, chest pain affects 20–40% of the general population. Various heart problems can cause pain in the chest.

#### 1. Heart attack

Chest pain is one of the fiveTrusted Source main symptoms of a heart attack. The others are: • pain in the jaw, neck or back

- lightheadedness or weakness
- pain in the arms or shoulders
- shortness of breath Females particularly may also experience sudden tiredness, nausea, or vomiting.

If someone thinks they are having a heart attack, they should seek emergency medical help. The quicker a person can get to ER, the quicker treatment can begin. Getting prompt treatment increases a person's chances of survival and potentially reduces the severity of the damage to the heart.

#### 2. Myocarditis

Myocarditis is when the heart becomes inflamed, resulting in symptoms that are similar to a heart attack, such as:

- chest pain
- shortness of breath
- fast or irregular heartbeat

According to the Centers for Disease Control and Prevention (CDC)Trusted Source, myocarditis usually results from a viral infection.

### 3. Angina

**Angina** feels like a squeezing pain or pressure on the chest. It occurs Trusted Source when not enough blood is getting to the heart. A person may also feel pain in the:

- shoulder
- back
- neck
- arms
- jaw Angina can feel like indigestion.

It is a symptom of coronary artery disease.

#### 4. Aortic aneurism and dissection

Aortic dissection is a tear or separation of the inner layers of the aorta, the main artery that leads from the heart. This can lead to a buildup of blood in the artery. An aortic aneurysm refers to an enlargement in the aorta. Both conditionsTrusted Source can cause the aorta to rupture or burst. Aortic dissection and a severe aortic aneurysm are emergencies and require immediate medical help. A stable aortic aneurysm may not need emergency treatment.

### 5. Coronary artery dissection

Coronary artery dissection is when tearing occurs in the coronary artery wall. If the innermost layer tears, blood can seep through and build up, causing a bulge. It can lead to a heart attack. Sudden intense pain that appears to "tear" across the chest, neck, back, or abdomen can be a symptom of coronary artery dissection. This is a rare but serious condition. The American Heart Association (AHA)Trusted Source notes that experts do not know exactly why it happens, but it can affect people without the usual risk factors for heart disease.

#### 6. Pericarditis

Pericarditis is inflammation of the sac around the heart. It can resultTrusted Source in:

- severe chest pain behind the breast bone
- a buildup of fluid around the heart
- cardiac tamponade, when fluid presses on the heart
- obstructive shock,

when the heart cannot fillTrusted Source with blood effectively. Pain may be worse when a person breathes in or is lying down but improves when they sit up or lean forward. It usually results from a viral infection, but there are many other possible causes.

#### 7. Mitral valve prolapse

A mitral valve prolapse is when a valve in the heart is unable to close fully. In mild cases, this condition may have no obvious symptoms. If symptoms occur, they includeTrusted Source: • rapid heartbeat

- chest discomfort
- fatigue

## Age for Sex, Chest pain type and Heart Disease

Ado	0					
Age	1	2	3	4	Summary	1
Absence	63.25	51	54.97	55	54.58	
Presence	(no value)	58	62	59.28	59.35	
Summary	63.25	51.44	55.19	57.2	55.68	

## Age for Sex, Chest pain type and Heart Disease

Ada						Summany
Age		2	3	4	Summary	Summary
Absence	2.91	49.25	50.52	53.14	51.19	52.71
Presence	56.4	57.5	57.75	55.52	56.04	56.59
Summary	54	51.15	52.98	54.99	53.84	54.43

# Heart Disease for Chest pain type and Sex

Heart Disease	1	2	3	4	Summary
0	1	2	2	2	2
1	2	2	2	2	2
Summary	2	2	2	2	2