

# Know the difference between a heart attack and **cardiac arrest**.

Characteristics	Heart Attack	Cardiac Arrest
<b>Average Age</b>	65 (men) : 72 (women) (less likely to occur in people younger than 35 years of age)	Mid-60s (occurs in all ages, although frequency increases with increasing age)
<b>Male : Female Incidence Rate</b>	2 : 1	3 : 2
<b>Immediate Cause</b>	Blockage or significant narrowing of a coronary artery, causing tissue damage to an area of heart muscle due to lack of oxygen	Cessation of mechanical activity of the heart, caused by a malfunction in the heart's electrical system
<b>Early warning symptoms</b>	Patients may experience chest pain or upper body discomfort, unusual fatigue, weakness, nausea, shortness of breath; symptoms may occur days or weeks before.	Some patients may experience palpitations, dizziness, chest pain or shortness of breath momentarily before loss of consciousness and collapse.
<b>Loss of pulse, blood pressure, consciousness</b>	Heart attack may lead to cardiac arrest	Yes—in all cases
<b>Breathing?</b>	Yes	No, although gasping and agonal breaths may be mistaken for normal breathing.
<b>Cardiac Rhythm</b>	May be accompanied by arrhythmias that do not cause loss of mechanical heart beats	Characterized by complete lack of a heart rhythm or one incapable of generating a mechanical heart beat
<b>Risk Factors/ Medical History</b>	Coronary artery disease, congenital abnormalities in vasculature of the myocardium	Cardiac risk factors include coronary artery disease, cardiomyopathy, myocardial infarction, valvular heart disease, congenital heart disease, and genetic syndromes. Non-cardiac causes include electrolyte imbalance, severe blood loss, drug use, and drowning
<b>Treatment</b>	<ul style="list-style-type: none"> <li>Medication to dissolve blood clot, dilate coronary blood vessels, and provide chest pain relief</li> <li>Coronary angioplasty and stent to open blocked artery</li> <li>Post-infarction care</li> </ul>	<ul style="list-style-type: none"> <li>CPR</li> <li>Defibrillation</li> <li>ACLS</li> <li>Post-arrest care</li> </ul>

NOTES: ACLS = advanced cardiac life support; CPR = cardiopulmonary resuscitation.

SOURCE: *Strategies to Improve Cardiac Arrest Survival: A Time to Act* (Institute of Medicine, 2015).