

# Invasive Tests and Procedures

AT-A-GLANCE



Name of Test	What the Test Does	Reason for Test
<p><b>Blood Tests</b> Enzymes C-Reactive P Homocysteine Lipoproteins Triglycerides BNP</p>	<p>Measures cardiac enzymes (including troponin and creatine kinase), C-reactive protein (CRP), fibrinogen, homocysteine, lipoproteins, triglycerides, brain natriuretic peptide (BNP) and prothrombin.</p>	<p>Confirms that a heart attack has occurred and determines extent of damage. Determines degree of risk for future heart-related problems and best treatment course. Helps determine degree of coronary artery disease (CAD).</p>
<p><b>Cardiac Catheterization</b> A general group of procedures. The most common is Coronary Angiogram (also known as Angiography or Arteriography)</p>	<p>Examines the inside of your heart's blood vessels using special X-rays called angiograms. Dye visible by X-ray is injected into blood vessels using a thin hollow tube called a catheter. Takes 2–3 hours.</p>	<p>One of the most useful and accurate tools in diagnosing cardiovascular problems. Can detect where arteries are narrowed or blocked. Can measure blood pressure within the heart and oxygen in the blood. Can evaluate heart muscle function. Helps determine best course of treatment.</p>
<p><b>Transesophageal Echocardiography</b> (Also known as TEE)</p>	<p>Uses high-frequency sound waves (ultrasound) to produce images of the heart. Involves passing a tube through the throat into the esophagus. Takes 10–30 minutes.</p>	<p>Evaluates the function and small detailed structures of the heart and associated vessels. Helps find abnormalities in the heart. Helps gather information about abnormal rhythms (arrhythmias) in the heart.</p>

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<b>Electrophysiologic Tests</b>	“Maps” the spread of electrical impulses through the heart with catheters tipped with electrodes that are threaded through blood vessels to different locations in the heart. Can stimulate the heart to beat rapidly.	Gives a more detailed analysis than simple ECG (EKG). Helps determine if abnormal rhythms (arrhythmias) develop in the heart and in which part of the heart they are located.
<b>Thallium Stress Test</b> (Also known as Myocardial Perfusion Imaging [MPI], Multigated Acquisition [MUGA] Scan, Radionuclide Stress Test and Nuclear Stress Test)	Similar to a routine exercise stress test but with images. Uses radioactive substance called thallium injected into the bloodstream when patient is at maximum level of exercise to take pictures with a special (gamma) camera of the heart’s muscle cells.	Helps measure blood flow of your heart muscle at rest and during stress. Helps determine extent of a coronary artery blockage. Helps determine extent of damage from heart attack. Helps determine cause of chest pain (angina). Helps determine level of safe exercise for patient.