

# Heart functions

MedCardiology Cardiology is the study of heart, the main pump for blood circulation through out the bod.

## [How the normal heart works?](#)

**Heart valves:** How the normal heart works? The normal heart is a strong, muscular pump. It pumps blood continuously throughout the body. Heart beats at the rate of 70 beats/min in average, it beats (expands and contracts) 100,000 times a day and pumps about 2,000 gallons of blood. The heart has four chambers. The upper two chambers are the right artium and left atrium, and the lower two are the right ventricle and left ventricle. Blood is pumped through the chambers, aided by four heart valves. The one-way valves open and close to let the blood flow in only one direction. [\[TOP\]](#) Heart has four valves: the tricuspid valve, located between the right atrium and the right ventricle

the pulmonary (pulmonic) valve, between the right ventricle and the pulmonary artery

the mitral valve, between the left atrium and left ventricle

the aortic valve, between the left ventricle and the aorta.

Each valve has a set of flaps (also called leaflets or cusps). The mitral valve has two flaps; the others have three flaps. Dark bluish blood, low in oxygen, flows back to the heart after circulating through the body. It returns to the heart through veins and enters the right atrium. This chamber empties blood through the tricuspid valve into the right ventricle. The right ventricle pumps the blood under low pressure through the pulmonary valve into the pulmonary artery. From there the blood goes to the lungs where it gets fresh oxygen. After the blood is refreshed with oxygen, it's bright red. Then it returns by the pulmonary veins to the left atrium. From there it passes through the mitral valve and enters the left ventricle. The left ventricle pumps the red oxygen-rich blood out through the aortic valve into the aorta. The aorta takes blood to the body's general circulation. The blood pressure in the left ventricle is the same as the pressure measured in the arm. [\[TOP\]](#)