

- The two valves within the heart—the tricuspid and mitral valves—prevent blood backflow from the ventricles into the atria.
- Because of the force of the blood as it is pumped within the heart, the leaflets of each of these valves are anchored into place by strands of mostly collagen and elastin called chordae tendineae. These anchors prevent the valve leaflets from opening in the wrong direction (into the atria).
- two valves that are directly outside of the heart—the pulmonary and aortic valves—are both tricuspid valves
- Aortic valves are located between the left ventricle of the heart and the aorta
- are semi-lunar valves composed of three leaflets
- During diastole (when the ventricles relax), the valve closes to prevent regurgitation (backflow) of the blood back into the heart. In this way, aortic valves play a major role in helping determine the direction of blood flow.
- During systole (when the heart contracts, moving blood into the blood vessels), the aortic valve opens, systole permitting blood to move into the aorta. This sequence of events repeats with each cardiac cycle, on average 60 times per minute.