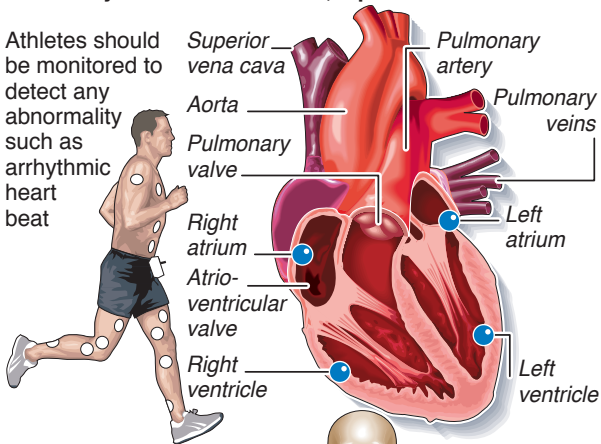


Hidden killer for young athletes

Sudden cardiac arrest is one of the leading killers of young athletes. Typically resulting from a congenital heart abnormality – in which the heart may be unable to cope with extreme exertion – it can also be caused by a blow to the chest, a phenomenon known as *commotio cordis*

Athletes should be monitored to detect any abnormality such as arrhythmic heart beat



NORMAL RHYTHM

1 Atria contract

Blood pumped into ventricles

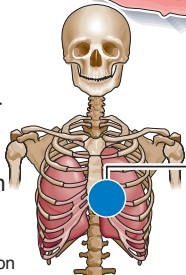


2 Ventricles contract

Blood pumped into body



MALFUNCTION: Unlike a *myocardial infarction*, when a blockage slows or stops blood flow, sudden cardiac arrest occurs when heart muscles begin to twitch spasmodically – *ventricular fibrillation*



COMMOTIO CORDIS: VF can also be caused by impact on sternum during 30 millisecond window in cardiac cycle.

Immediate electrical defibrillation is required

