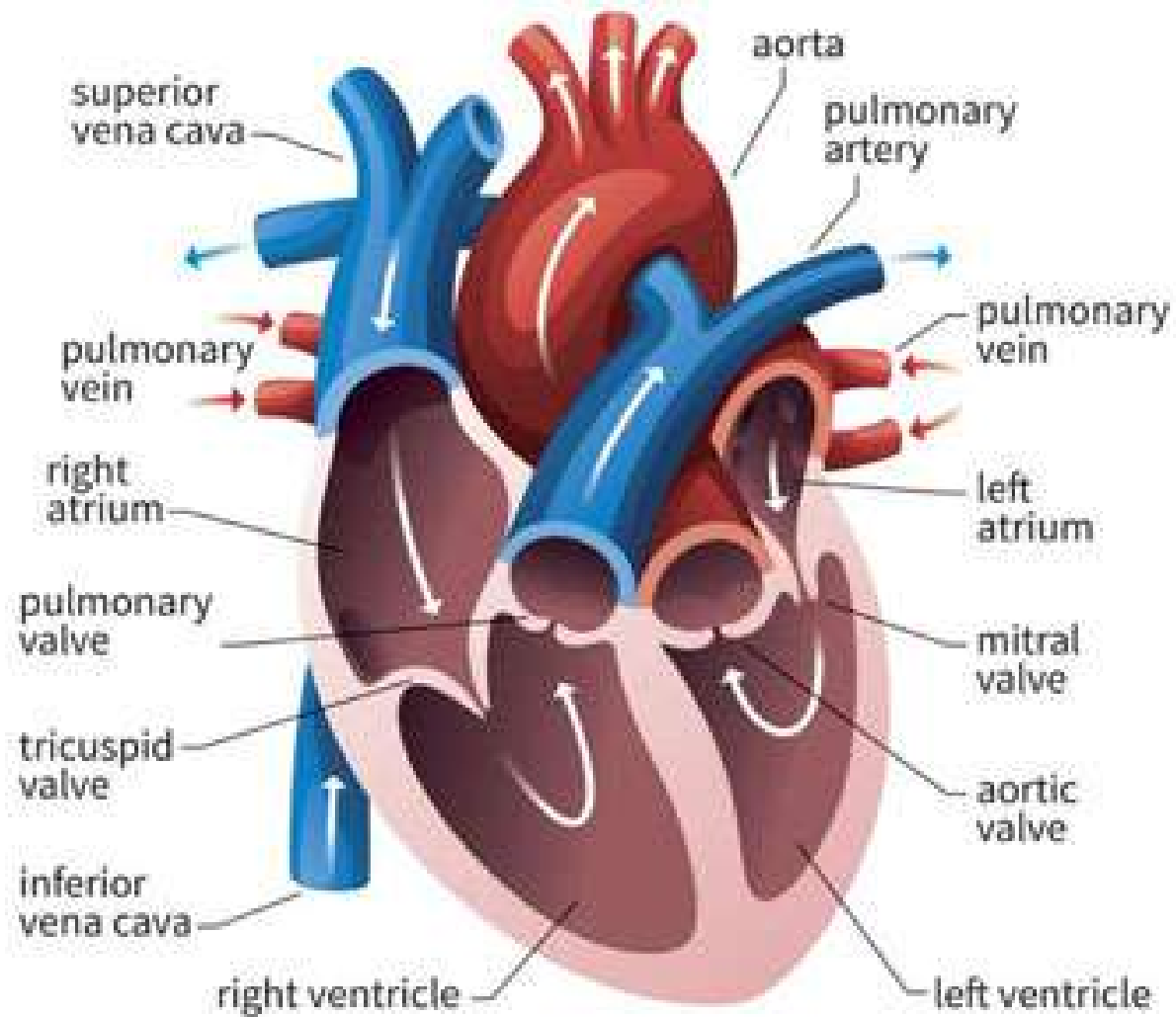




CIRCULATORY SYSTEM

[intro video](#)

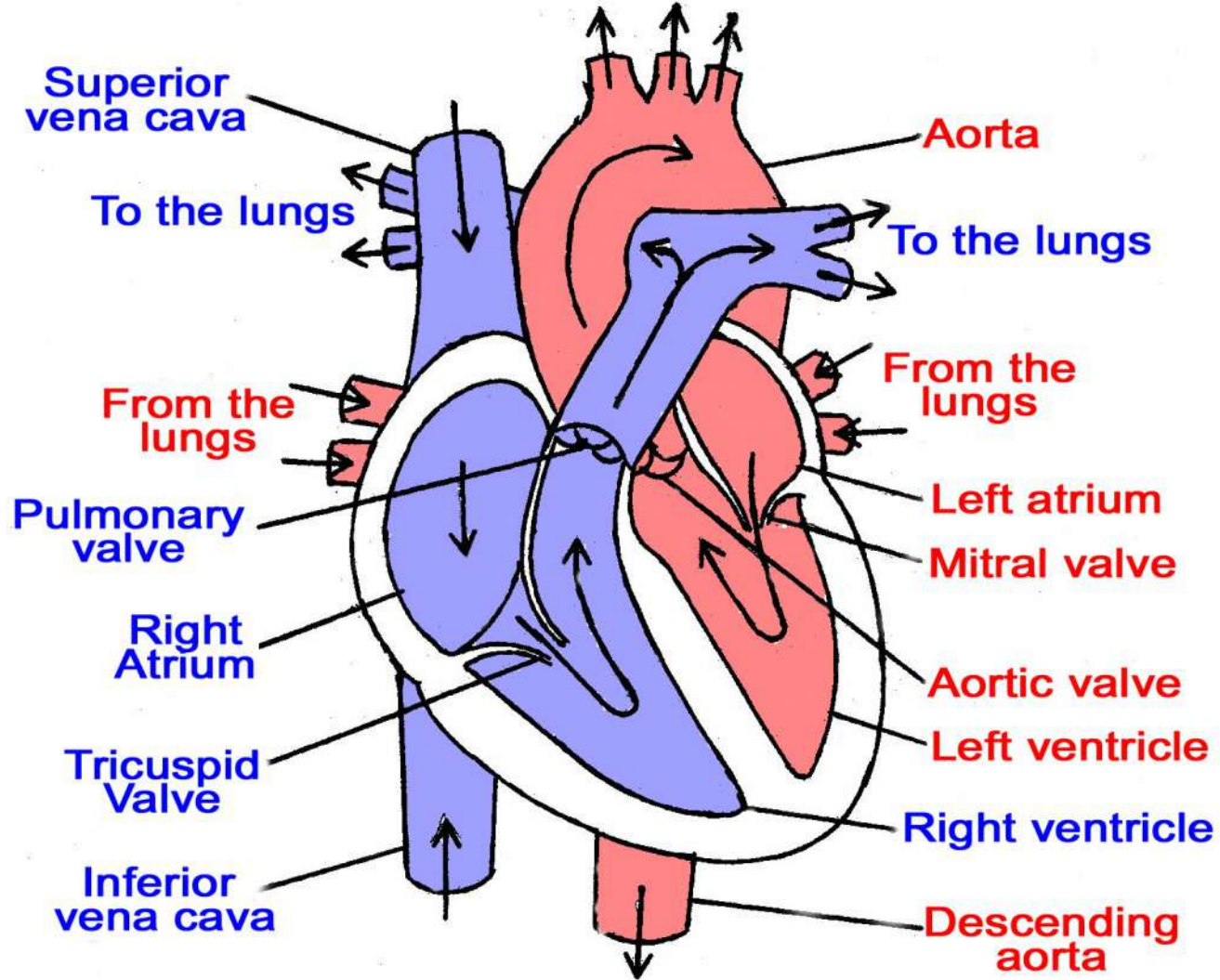


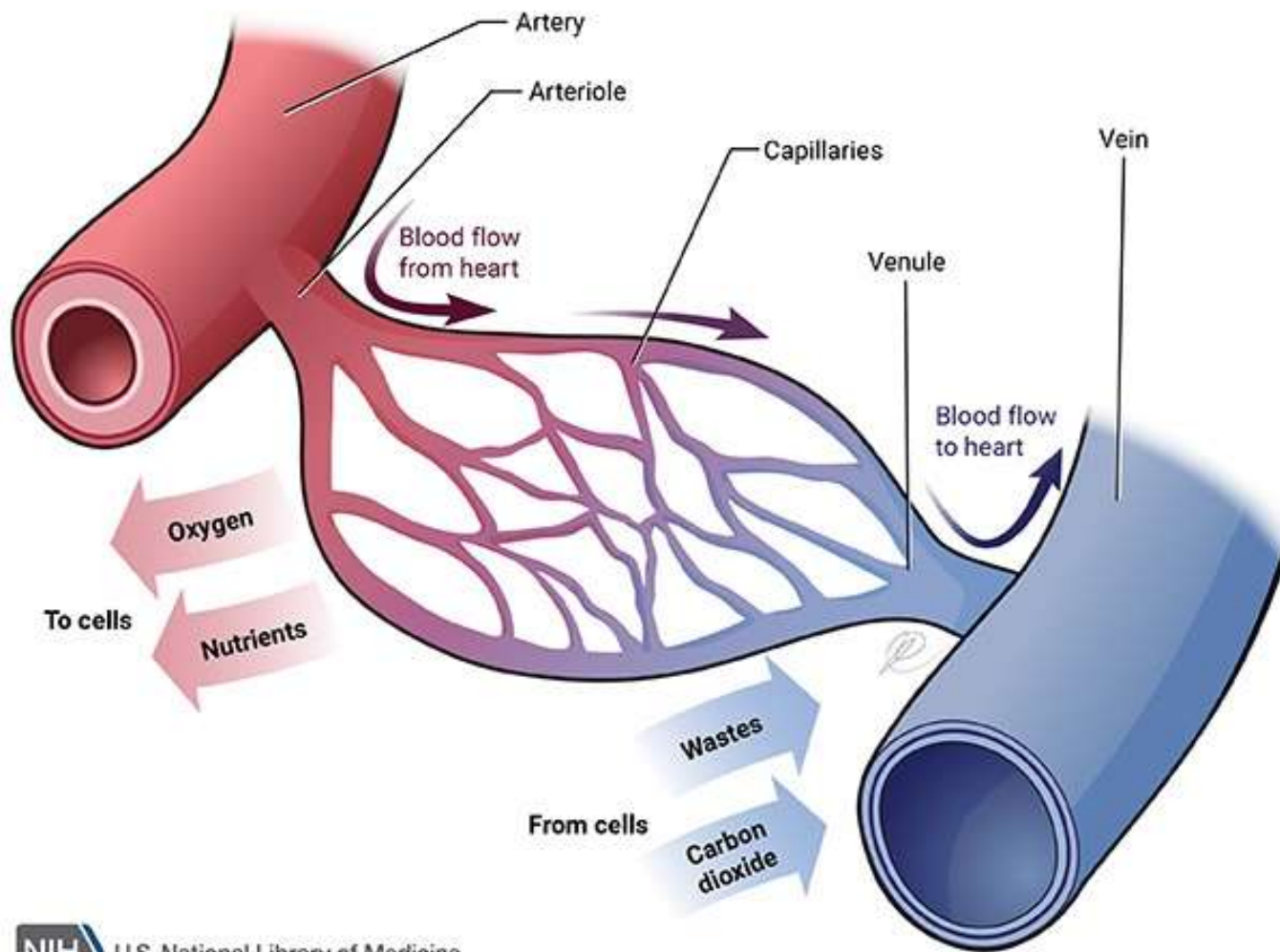
De-oxygenated

1. Inferior/Superior Vena Cava
1. Right atrium
1. Tricuspid valve
1. Right Ventricle
1. Pulmonic Valve
1. Pulmonary trunk
1. Pulmonary arteries
2. ****LUNGS*****

Oxygenated

9. Pulmonary veins
10. Left atrium
11. Bicuspid/Mitral valve
12. Left Ventricle
13. Aortic Valve
14. Aortic arch
15. Descending aorta





Conduction

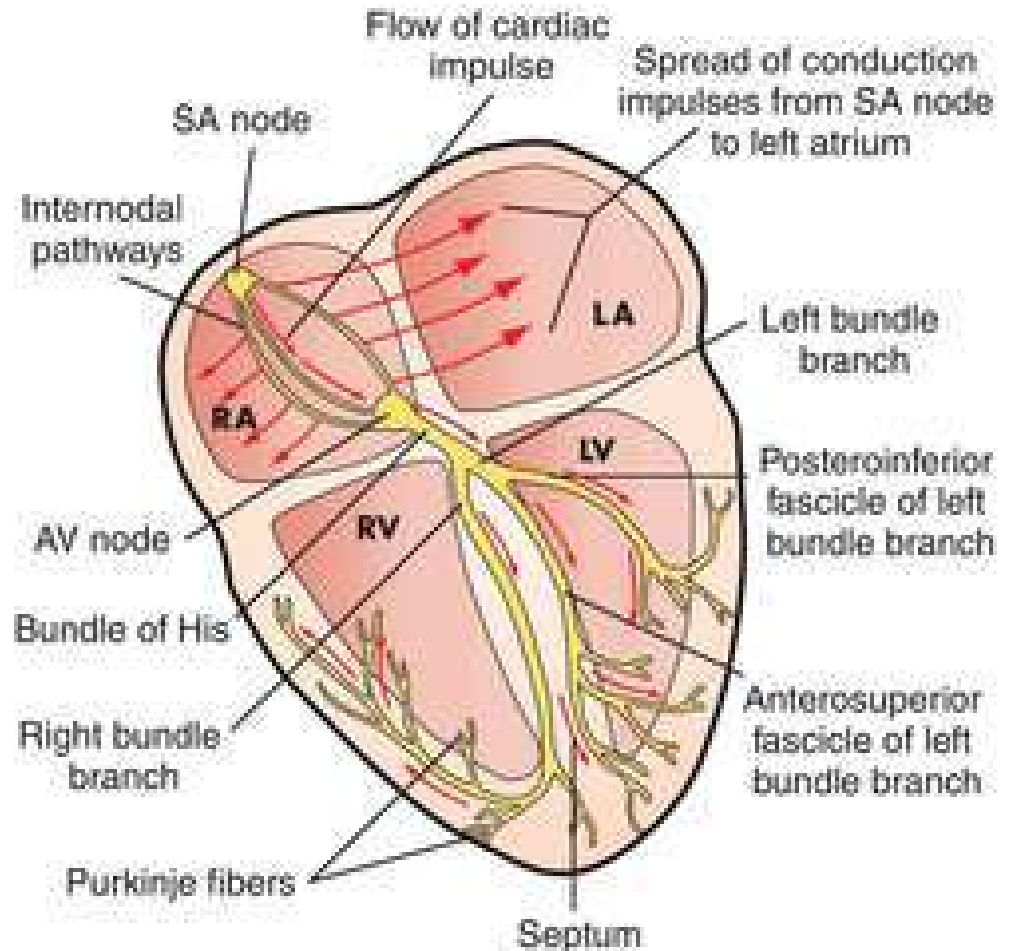
SA NODE

AV NODE

BUNDLE of HIS

Purkinje Fibers

[Conduction video](#)



VITALS Norms: Blood Pressure

Blood pressure ranges

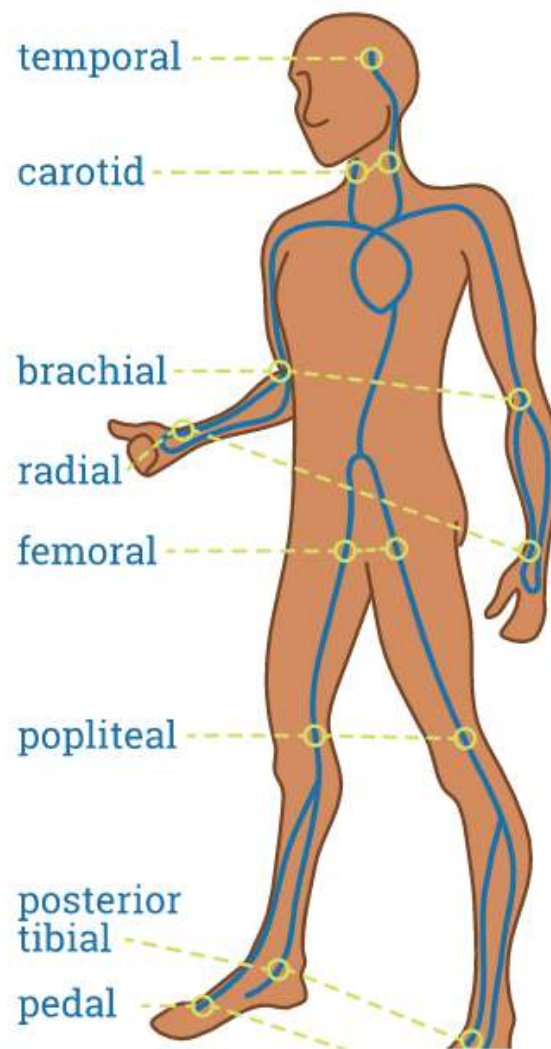
Category	Systolic (mm Hg)	Diastolic (mm Hg)
Expected reference range	Less than 120	Less than 80
Elevated	120 to 129	Less than 80
High blood pressure (stage 1)	130 to 139	80 to 89
High blood pressure (stage 2)	140 or greater	90 or greater
Hypertensive crisis	180 or greater	120 or greater

VITALS Norms: Heart Rate

Average heart rate by age

Age	Heart rate (beats per minute)
Newborn (birth to 1 month)	120 to 160
Infant (1 to 12 months)	80 to 140
Toddler (1 to 3 years)	80 to 130
Preschool-age (3 to 5 years)	80 to 120
School-age (6 to 15 years)	70 to 100
Adult (older than 15 years)	60 to 100

Pulse sites



Respirations

Rate, Rhythm, Depth

Newborn 30-50/min Adult: 12-20/min

Sounds: wheezing, rales, ronchi

Define: hypoxia, tachypnea, bradypnea

Temperature

Define: Oral, tympanic, temporal

98.6 degrees F (37 degrees C)

Greater than 99.5 is considered febrile

Pulse Oximetry

Peripheral capillary O₂ saturation (SpO₂)

Finger-tip or earlobe

95% or higher = normal

If less than 95% assess patient

Cold hands, nail polish, acrylic nails, edema, carbon monoxide poisoning can hinder results