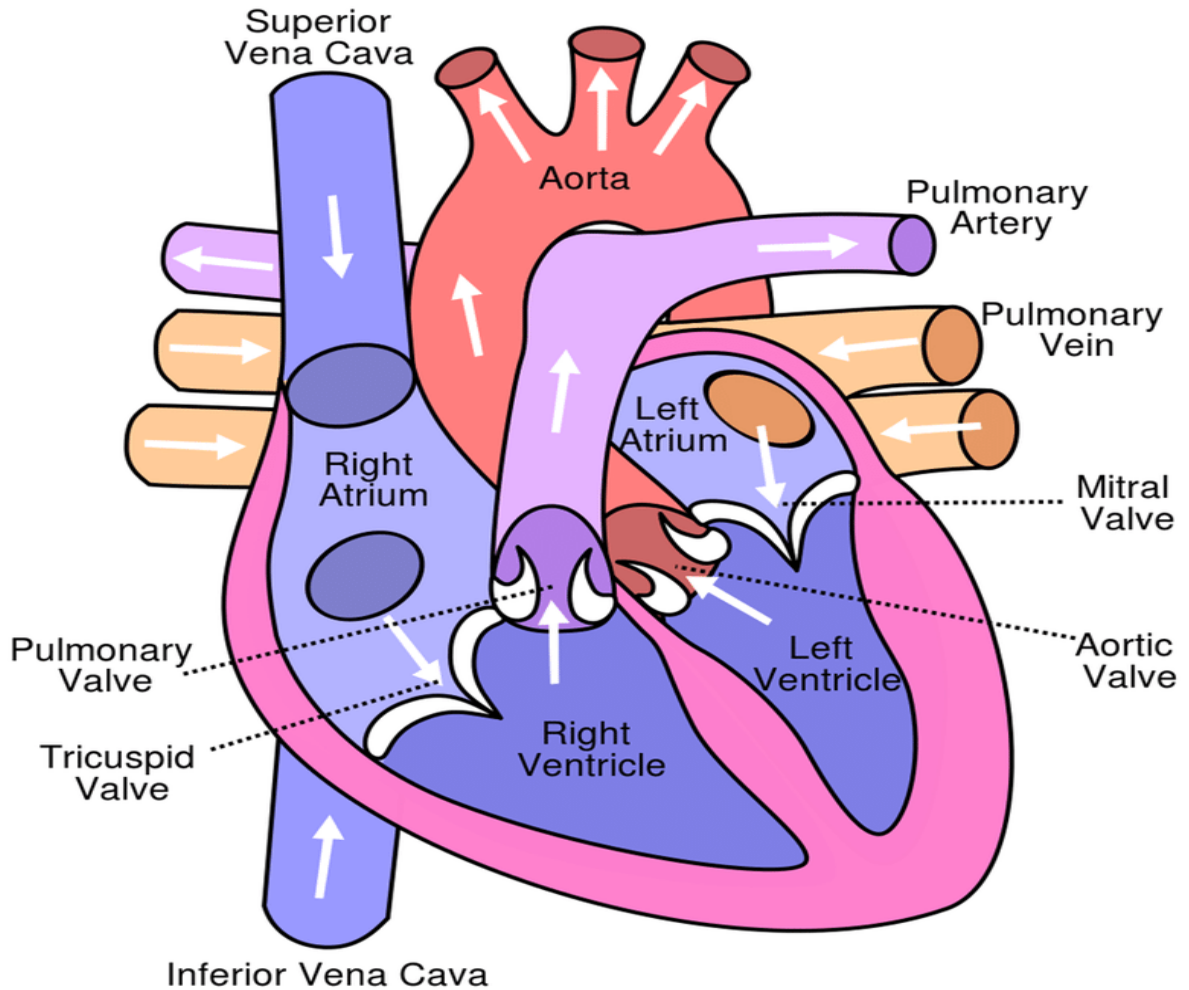


Heart assessment

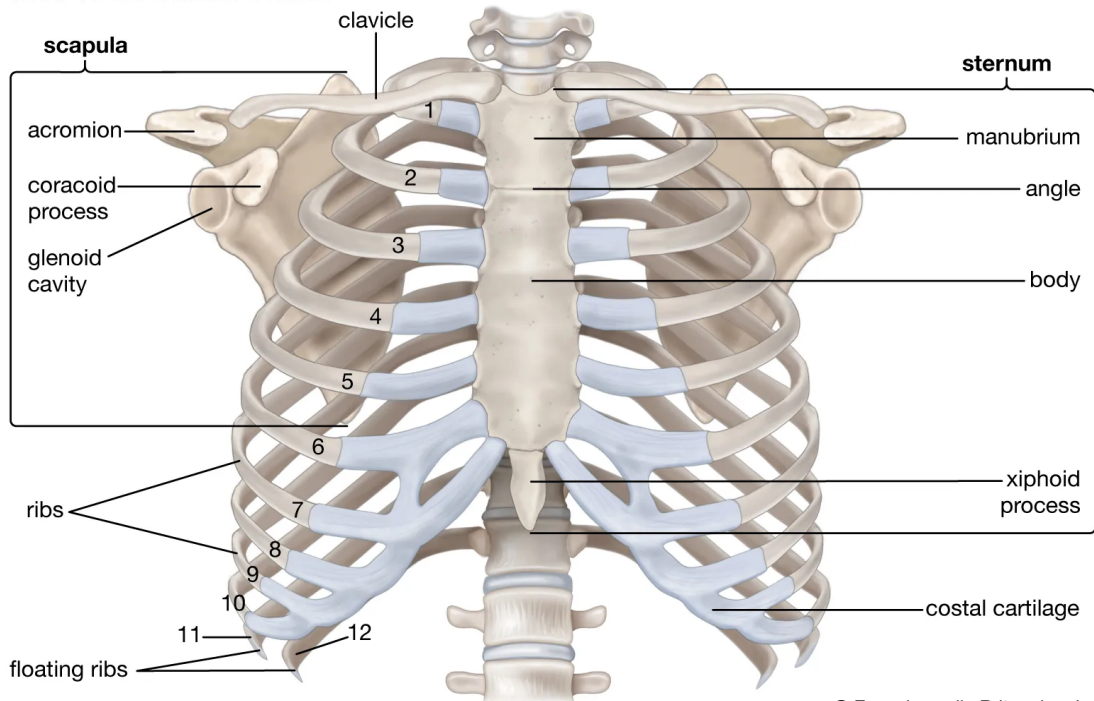


	Questions	Rational
Current Symptoms	Do you experience chest pain? Describe	chest pain can be cardiac ,pulmonary muscular or gastrointestinal in origin
	Do you tire easily or experience	Fatigue may result from compromised cardiac output
	Do you have dyspnea difficult breathing or shortness of breath	Dyspnea may result from congestive heart failure pulmonary disorders, coronary artery disease and myocardial infarction. It may occur at rest ,during sleep or with exertion
	Do you experience nocturia	Enhanced renal perfusion during periods of rest may promote nocturia
	Do you experience palpitation?	Palpitation may occur with an abnormality of heart's conduction system during the heart's attempt to increase cardiac output by increase the heart rate
	DO you experience dizziness?	Dizziness may indicate decreased blood now to the brain put the patient at risk for falls

	Do you experience swelling in your feet, ankles or legs?	Swelling in the lower extremities usually occurs as a result of heart failure
	Have you been diagnosed with a heart defect or a murmur	Congenital or acquired defects affect the heart's ability to pump, decreasing the oxygen supply to the tissues
	Have you ever had rheumatic fever	Approximately 40% of people with rheumatic fever develop rheumatic carditis
	Have you been ever cardiac surgery	Previous heart surgery may change the heart sounds heard during auscultation
Family History	Is there History of hypertension MI ,CAD and DM in your family	A genetic predisposition to these risk factors increase the client chance for development of heart disease
Life Style and Health Practice	.Do you smoke? How many backs of cigarette per day for how many years?	Cigarette Smoking greatly increases the risk of heart disease
	What type of stress do you have in your life?	Stress has been identified as a possible risk of heart disease
	Do you exercise? What type of exercise and how often?	A sedentary life style is a known modifiable risk factor contributing to heart disease
	How many pillows do you use to sleep	Orthopnea is the inability to breathe while supine which may result from compromised heart function
Inspect the client's skin and hair	Facial skin color should be uniform	Flushed skin may indicate rheumatic heart disease or presence of a fever or increased cardiac output may make skin warm
		Grayish undertone are often seen in clients with CAD or those in shock
		A ruddy color may indicate polycythemia (increase) or Cushing syndrome
		Absence of body hair on the arms or legs may indicate diminish the arterial blood flow
Inspect the eyes and the tissues surroundings eyes (Per orbital area)	The eyes should be uniform and not have a protruding appearance	Protruding eyes are seen in hyperthyroidism. High cardiac output states, a tendency toward tachycardia and potential for congestive heart failure accompany that disease
	Per orbital are should be relative flat. No puffiness should be present	Per orbital puffiness may results from fluid retention my edema or valvular disease
	Sclera should be whitish in color. The cornea should be without an arcus which is ring like structure	A blue color in the sclera is often associated with Marfan's Syndrome a degenerative disease in the connective tissue which over times may cause descending aorta to either dilate or dissect

		leading to abrupt death
		An arcus in a young person may indicate hypercholesterolemia
	The conjunctiva should be pinkish in color and the eye lid should be smooth	Xanthelasma are yellow cholesterol deposits on the eyelids which indicate premature atherosclerosis
Inspect the lips	Should be uniform of color without any underlying tinge of blueness	Blue —tinged lips may indicate cyanosis which is often a late sign of inadequate tissue perfusion
Inspect the head position	The client should be able to hold the head steady	Rhythmic head bobbing (up and is down) in synchrony with heart beat is characteristics of sever aortic regurgitation which reverberate up ward toward the head created by the pulsation were of the regurgitation blood
Inspect the earlobes	the earlobes should be relatively smooth without creases except injury is present	Bilateral earlobes creases are often associated with CAD
Inspect the hands and fingers	Fingernails relatively flat and pink with white crescent at the base of each nail	Clubbing may be associated with cyanosis or infective endocarditic condition caused by bacterial infiltration of the lining of the heart chambers This red lines or splinter hemorrhage in the nailed are also with infective endocarditis
Inspect legs for skin color and hair distribution	Skin color and hair distribution as mentioned before -Free from edema	Swelling or edema may indicate heart failure or venous insufficiency
Inspect the jugular veins	jugular veins are not normally visible when client sits upright The external jugular veins is located over the sternocleidomastoid	Obvious pulsation of the jugular veins that are present during inspiration and expiration and coincide with the arterial pulse are commonly seen with sever congestive heart failure
	The internal jugular vein is located behind this muscle medial to the external jugular lateral to the carotid artery	
Inspect the neck for distension of the jugular veins	jugular veins normally distended only 3 cm above the sternal angle when the client is lying in 45 degree angle	Distension of the neck veins indicated elevation of central venous pressure commonly seen with congestive heart failure fluid overload or pressure on the superior vena cava

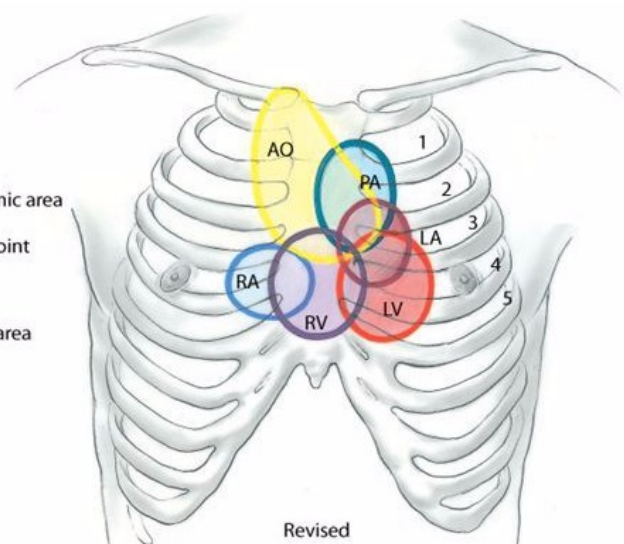
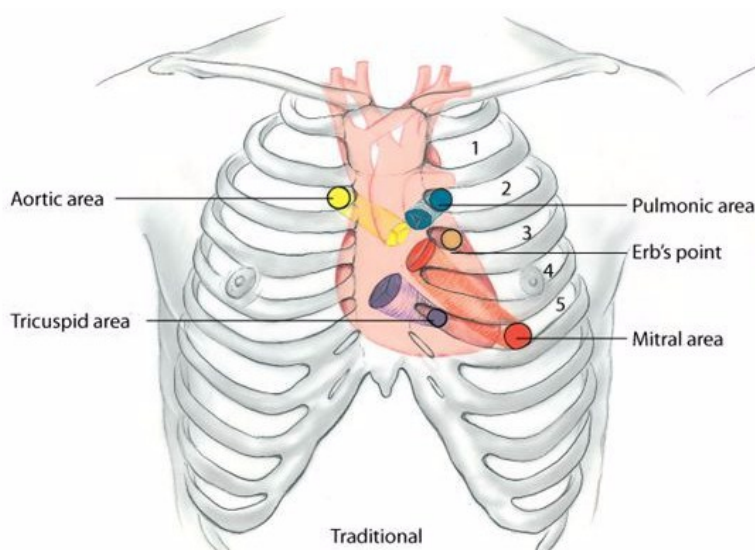
Bones of the human thorax



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<p>Inspect the carotid arteries pulsation. The client lying at a 45 degree angles</p>	<p>carotid arteries located lateral to the tracheas in a groove medial to sternocleidomastoid muscle Pulsation should be visible bilaterally</p>	<p>Bounding pulse may indicate fever. The absence of pulsation may indicate an obstruction either internal or external to the arteries</p>
<p>Inspect the client's chest observe the respiratory pattern</p>	<p>Should be even regular and unlabored with no retractions</p>	<p>Pulmonary edema is often severe complications of cardiovascular disease</p>
<p>Observe the veins on the chest</p>	<p>Should be evenly distributed relatively flat</p>	<p>Dilated, distended veins on the chest indicate an obstructive process as seen obstructive of the with superior vena cava</p>
<p>Inspect the precordium (entire chest For pulsation)</p>	<ul style="list-style-type: none"> -First observe the client in upright position then at a 30 degree angle .Stand on the client's right side and look for apical impulse -Observe over the 5 key land marks -Confirm that the point of maximum impulse (PMI) 	<p>Pulsation which may also called heaves or thrill (forceful rising of the landmark) other than apical pulsation are considered abnormal and should be evaluated. This could result from valvular regurgitation enlarged ventricle or pulmonary artery dilatation. If left ventricle hypertrophy is present, the PMI is displaced laterally from the 5th ICS in the MCL</p>

<p>Palpate the carotid arteries</p> <p>Palpate each artery alternately</p> <p>Note: amplitude of the pulse, elasticity of the artery and any thrill</p>	<p>-Pulse equally strong a 2+ with no variation in strength from beat to beat</p> <p>-Arteries are elastic and no thrill are noted</p> <p>-Pulse amplitude Scale</p> <p>Absent =0, weak =1, Normal =2, increased =3, Bounding =4</p>	<p>Pulse unequally may indicate arterial constriction or occlusion in one carotid</p> <p>-Weak pulses may indicate hypovolemia, shock, or Decreased COP</p> <p>-Loss of elasticity may indicate arteriosclerosis</p> <p>-Thrill may indicate narrowing of the artery</p>
<p>Palpation</p> <p>Palpate the Apical Impulse</p>	<p>the Apical Impulse is palpate in the mitral area over the MCL 5th ICS as a soft vibration a tapping sensation with each heart beat and may the size of 1-2 cm</p>	<p>the Apical Impulse May be impossible in clients' with pulmonary emphysema</p> <p>A heave which is a forceful thrust may indicate increased right ventricular pressure</p> <p>If the apical impulse larger than 1-2 cm, displaced suspect cardiac enlargement</p>
<p>Palpate for abnormal pulsation use palmar surface to palpate the apex, left sternal border and base</p>	<p>No pulsation or vibration palpated in the area of the apex ,left sternal border or base</p>	<p>A thrill which feels similar to a purring cat or a pulsation is usually associated with grade IV or higher murmur</p>
<p>Palpate for Hepatic —Jugular reflex Press below the right costal margin for 30- 60 second</p>	<p>With normal heart function diminish distension of the jugular veins quickly</p>	<p>In cases of right side heart failure the distention of the jugular veins is sustained</p>
<p>Percuss the client's chest to determine the cardiac border</p>	<p>Dullness percussion in the left 5th ICS in the MCL in the size 1- 2cm</p>	<p>An enlarged heart emits a dull sound on percussion over a large area than a heart of normal size</p>
<p>Auscultation the carotid arteries using bell and ask the client to hold breath</p>	<p>No blowing or swishing or other sounds are heard</p>	<p>A bruit ,blowing or swishing sound caused by turbulent blood flow through a narrowed vessels</p>



Auscultation Auscultator Heart Rate and Rhythm	Rate 60-100 beat per minute with regular rhythm	Bradycardia (less than 60 beats \min) or tachycardia (more than 100 beats \min) may result in decreased cardiac output
Auscultation for a pulse deficit by palpating the radial pulse while auscultating the apical pulse in full min	The radial and apical pulse should be identified	A pulse deficit (differences between the apical and peripheral \ radial pulses) may indicate atrial fibrillation, premature ventricular contraction, and varying degrees of heart block
Auscultation to identify S1 or "lub" (systole) and S2 "dub"	S1 corresponds with each carotid pulsation and is loudest at the apex of the heart S2 immediately follows after S1 and is loudest at the base of the heart	

Is 1st sound

-Produced by the closure of the mitral and tricuspid valve leaflets after entry of blood to right and left ventricles

-Heard over the apex or over all five locations

Is the 2nd sound

-Produced by the closure of the aorta and pulmonary artery

-Heard over the base of the heart in the aorta and pulmonary artery the

S1-----Systolic Pause S2-----Diastolic pause S1

Auscultation for extra heart sound	Normally no sounds are heard	Sounds such as S3 and S4, murmurs (originated from stenotic valves are best heard with the bell) A friction rub may also be heard during the systolic pause
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S3 heart sound

S1-----Systolic Pause S2-----S3 Diastolic S1

S3	<ul style="list-style-type: none">-Listen to it using the ball of the stethoscope in the apex area-S3 the early diastolic sound occurring shortly after s2-Its soft ,dull sound-Left lateral position is best position for auscultating the sound-It may be physiological or pathological-It's physiological when client is a child, young pregnant or even up to the age of 40-Client over 40 considered the sound pathological and called ventricular gallop-Its' considered an early signs of the onset of congestive heart failure
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S4 heart sound

S1-----Systolic Pause S2----- Diastolic pause S4----- S1

S4	<ul style="list-style-type: none">-using the ball of the stethoscope in the apex area-the late diastolic sound occurring just before S1-Left lateral position is best position for auscultation the sound-It is very soft sound-It may be physiological or pathological-Normally found in children ,older adults and athletes-It reflects decreased ventricular compliance-This is term as a trial gallop-Condition that may contribute to the development of an S4 include MI, CAD, Aortic stenosis and hypertension
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