

LUNG SOUNDS

Wheeze

Musical noise during inspiration or expiration. Usually louder during expiration.



(continuous)

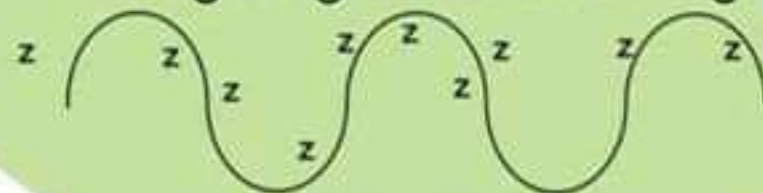
Stridor

Stridor is a high-pitched musical sound heard on inspiration, resembling wheezing, however the sound is louder over the throat, due to a partially obstructed airway.



Rhonchi

Rumbling, coarse sounds, like a snore, during inspiration or expiration. May clear with coughing or suctioning.



(continuous)

LUNG SOUNDS

Crackles

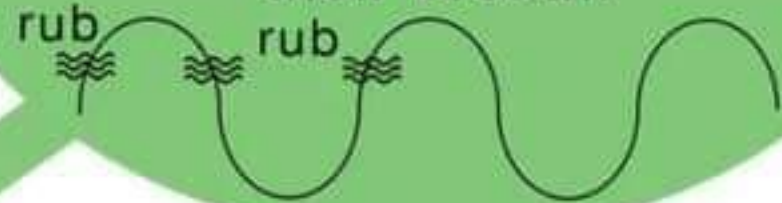
High pitched,
heard during inspiration,
not cleared by a cough.



(discontinuous)

Pleural Friction Rub

Pleural friction rub
occurs during inhalation and
exhalation, may be continuous
or broken, and creaking or grating.
They stop when the patient holds
their breath.

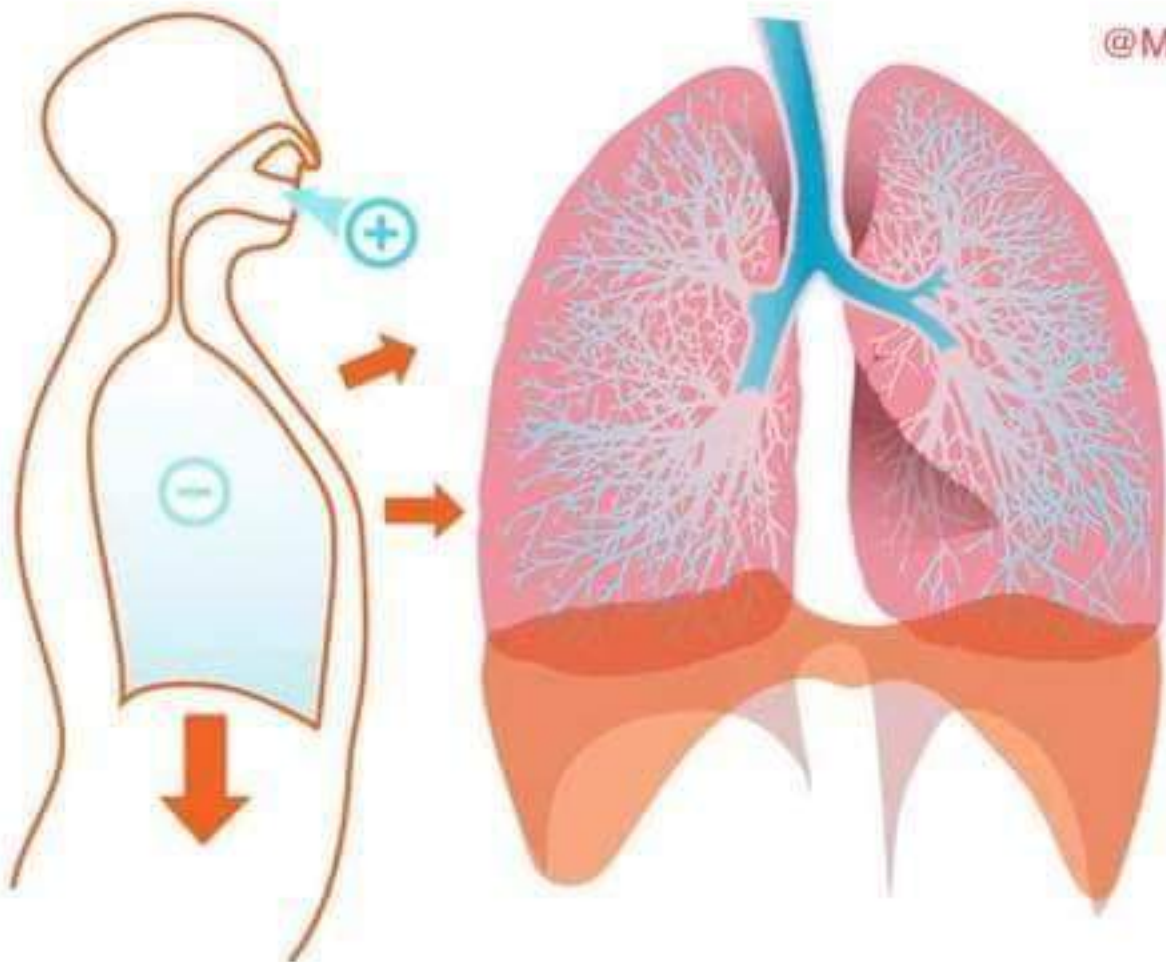


**Auscultate lung sounds
with a stethoscope**

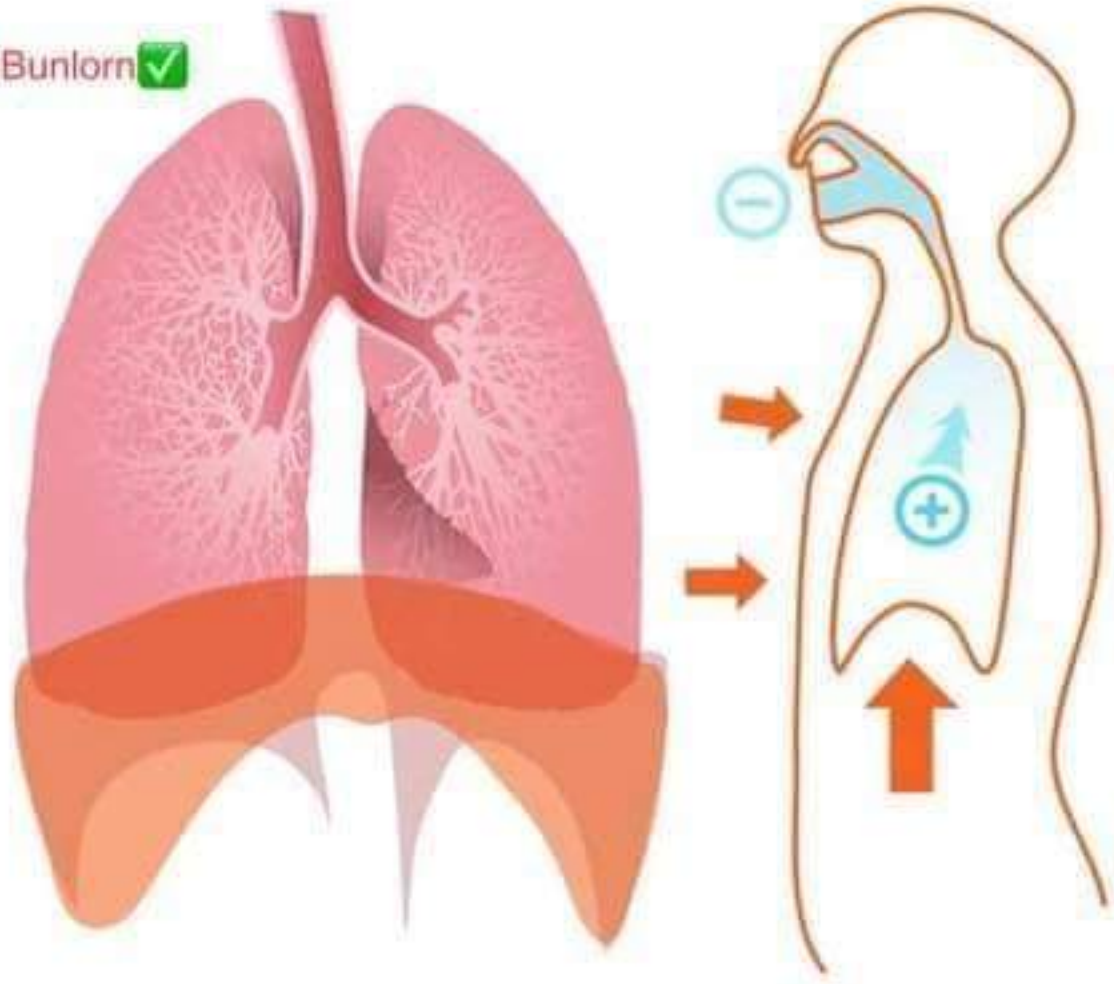


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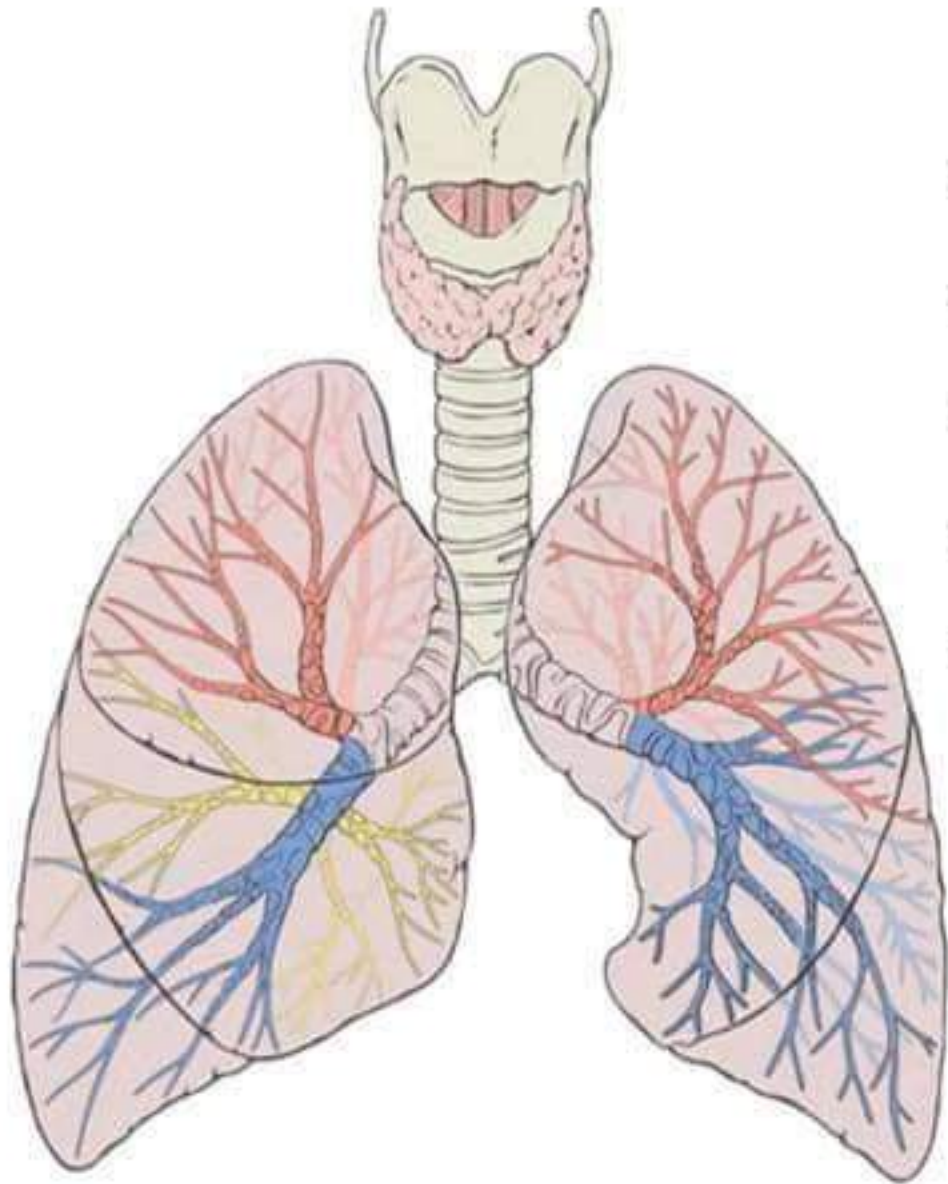
Inhalation



Exhalation

Abnormal breath sounds

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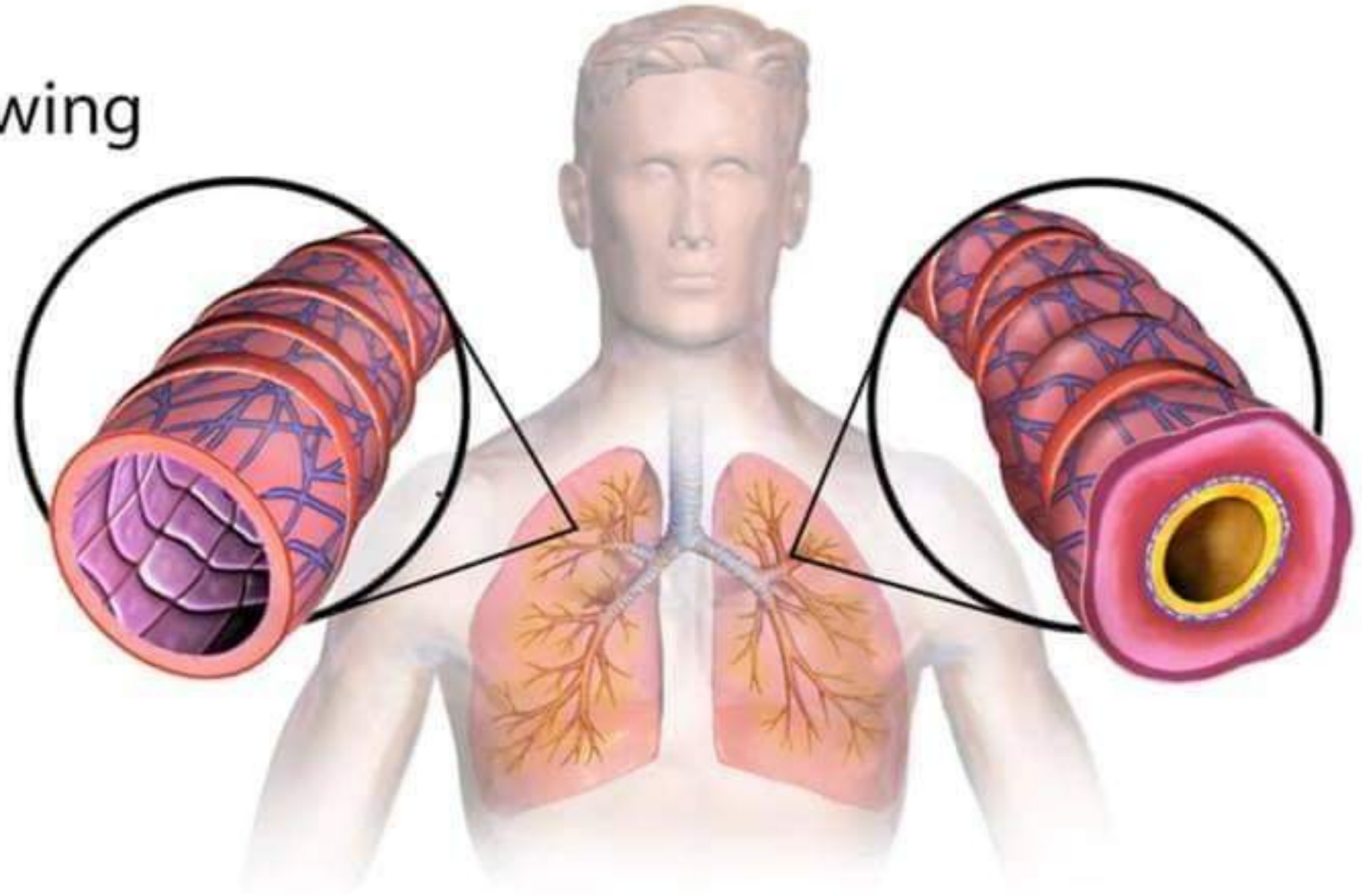


- Wheezing
- Rhonchi (Low pitched wheezes)
- Stridor
- Crackles - fine & coarse (aka Rales)
- Pleural friction rub

Wheezing

Caused by narrowing
of the airways

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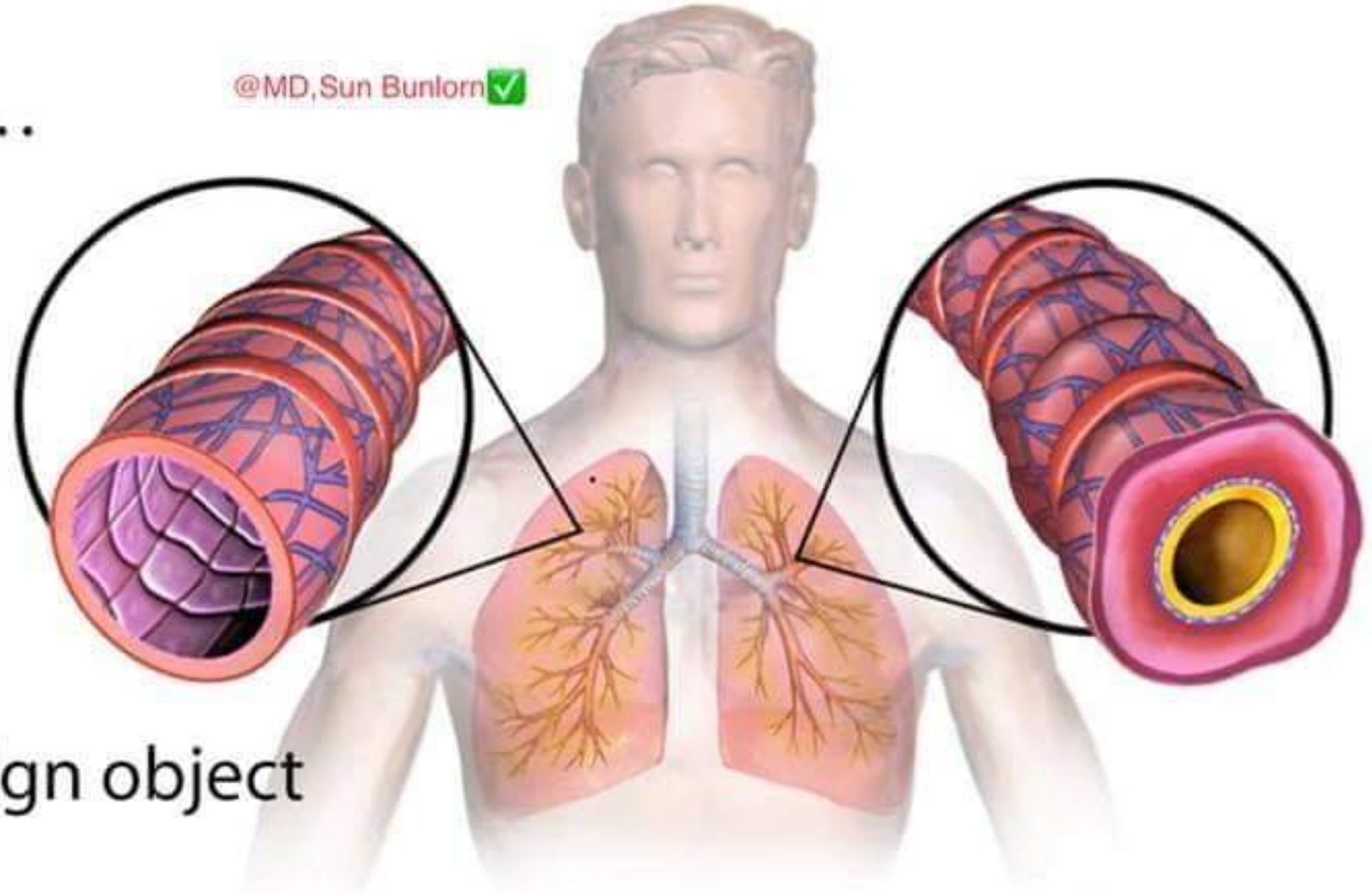


Wheezing

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Associated with...

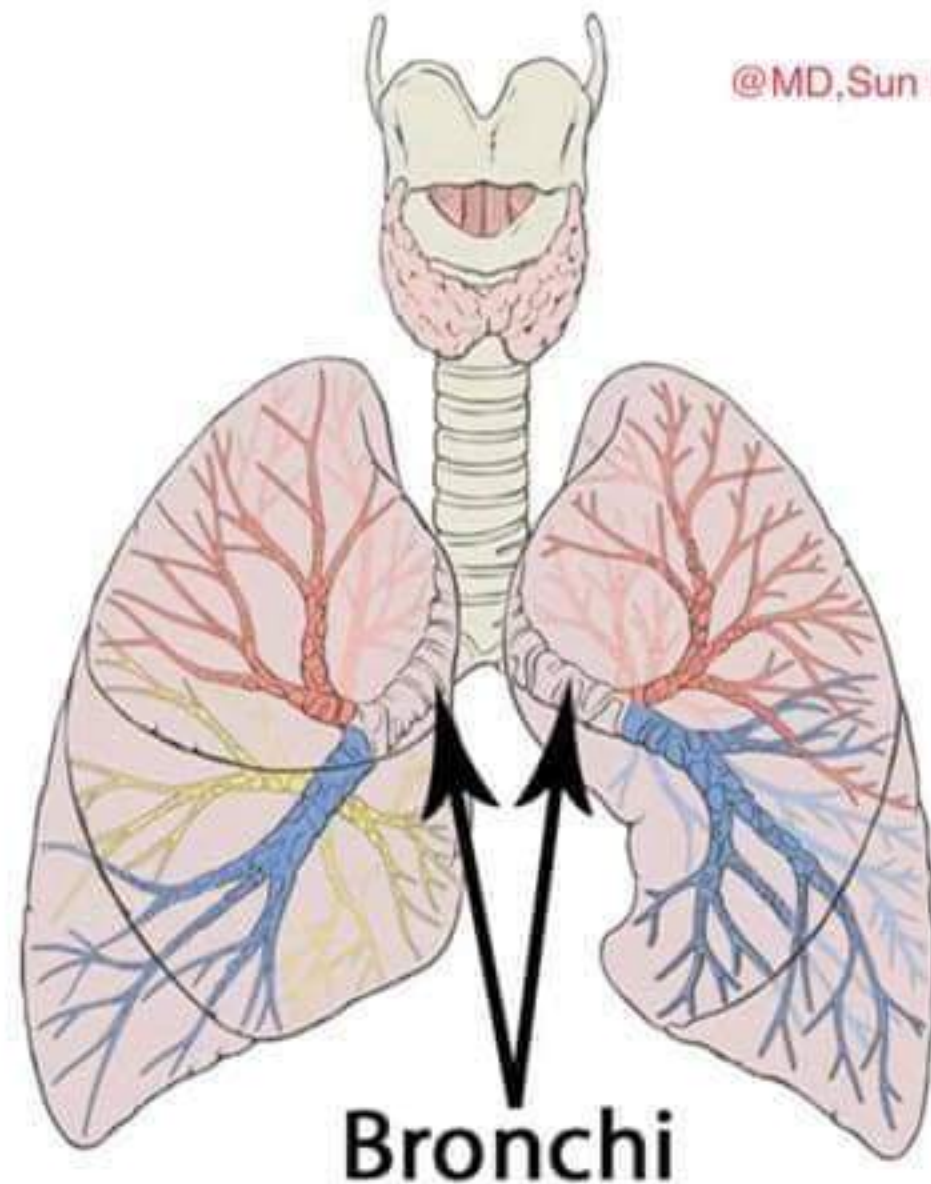
- Asthma
- Bronchitis
- Pneumonia
- COPD
- Smoking
- Heart failure
- Inhaling a foreign object into the lungs
- Allergic reaction



May occur
during inhalation
or exhalation

Are continuous
with a musical
quality

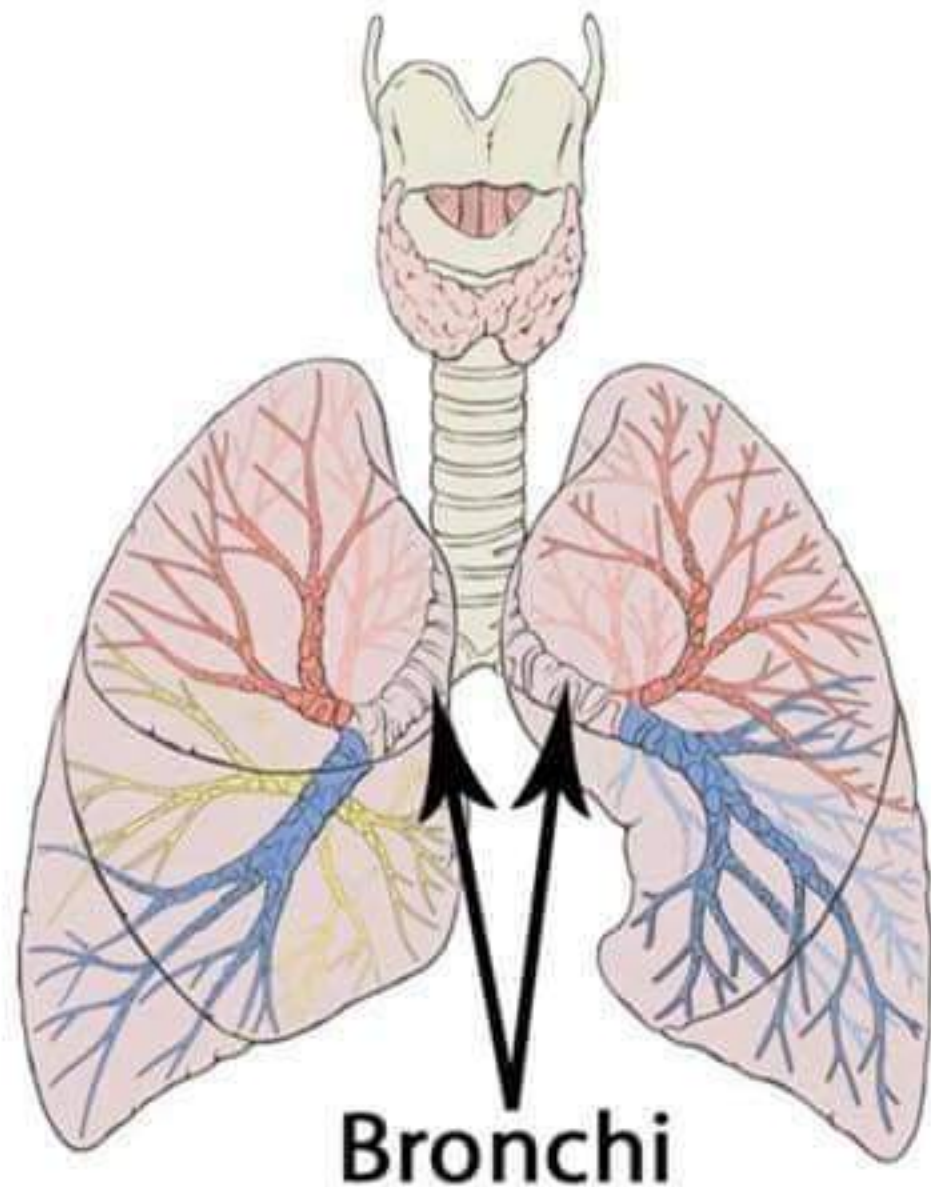
Rhonchi occur in the bronchi



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- Snoring or moaning sound
- Continuous, snoring, gurgling, or rattle-like quality
- Occur in the bronchi as air moves through tracheal-bronchial passages coated with mucous or respiratory secretions

Rhonchi occur in the bronchi

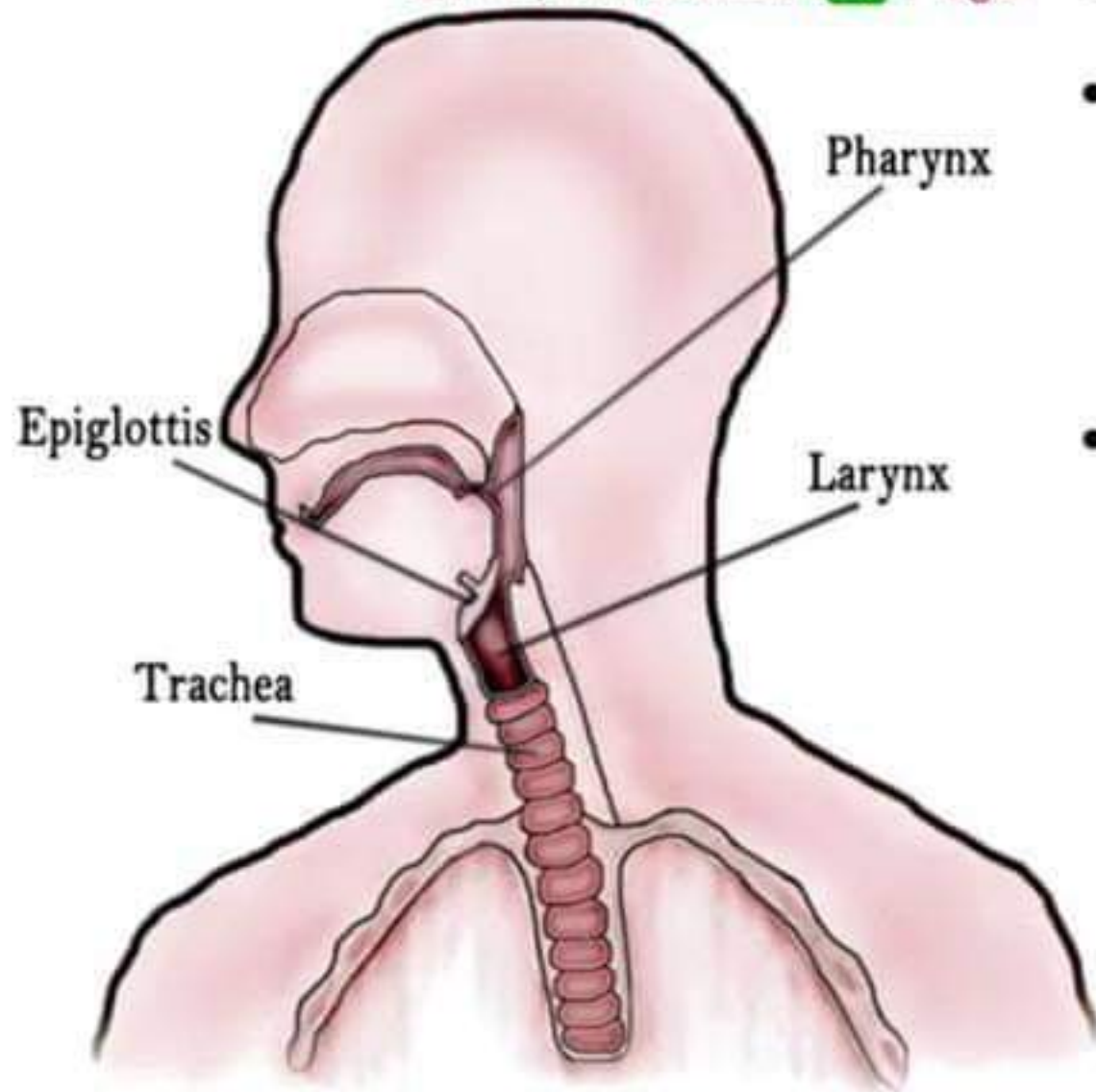


- Often heard in pneumonia, chronic bronchitis, or cystic fibrosis
- Usually clear after coughing

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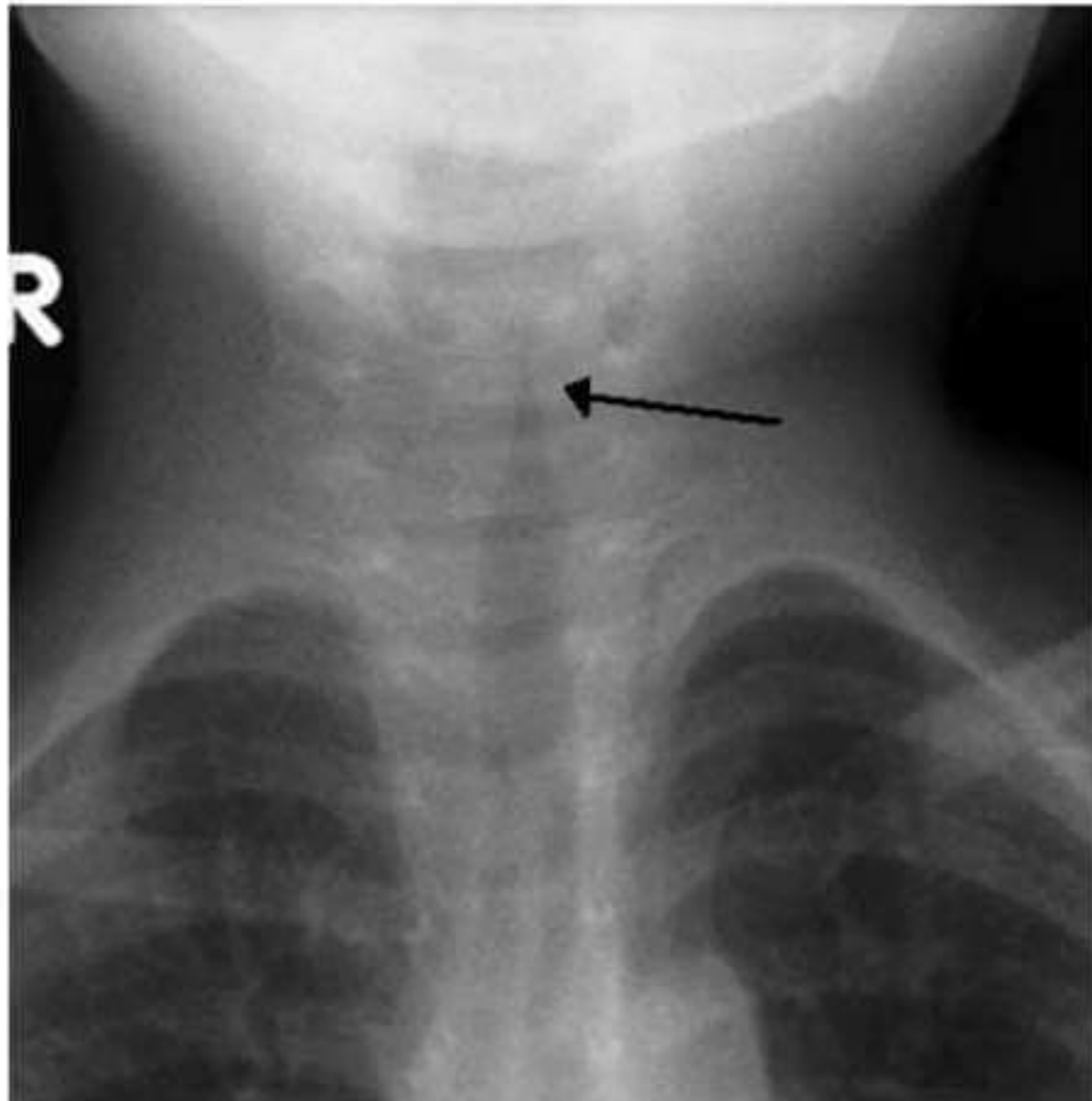
Stridor

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- Sound is louder over the throat
- Air is moving roughly over a partially-obstructed upper airway
- Caused by something blocking the larynx
 - Person choking on an object
 - Person with an infection
 - Swelling in the throat
 - Laryngospasm

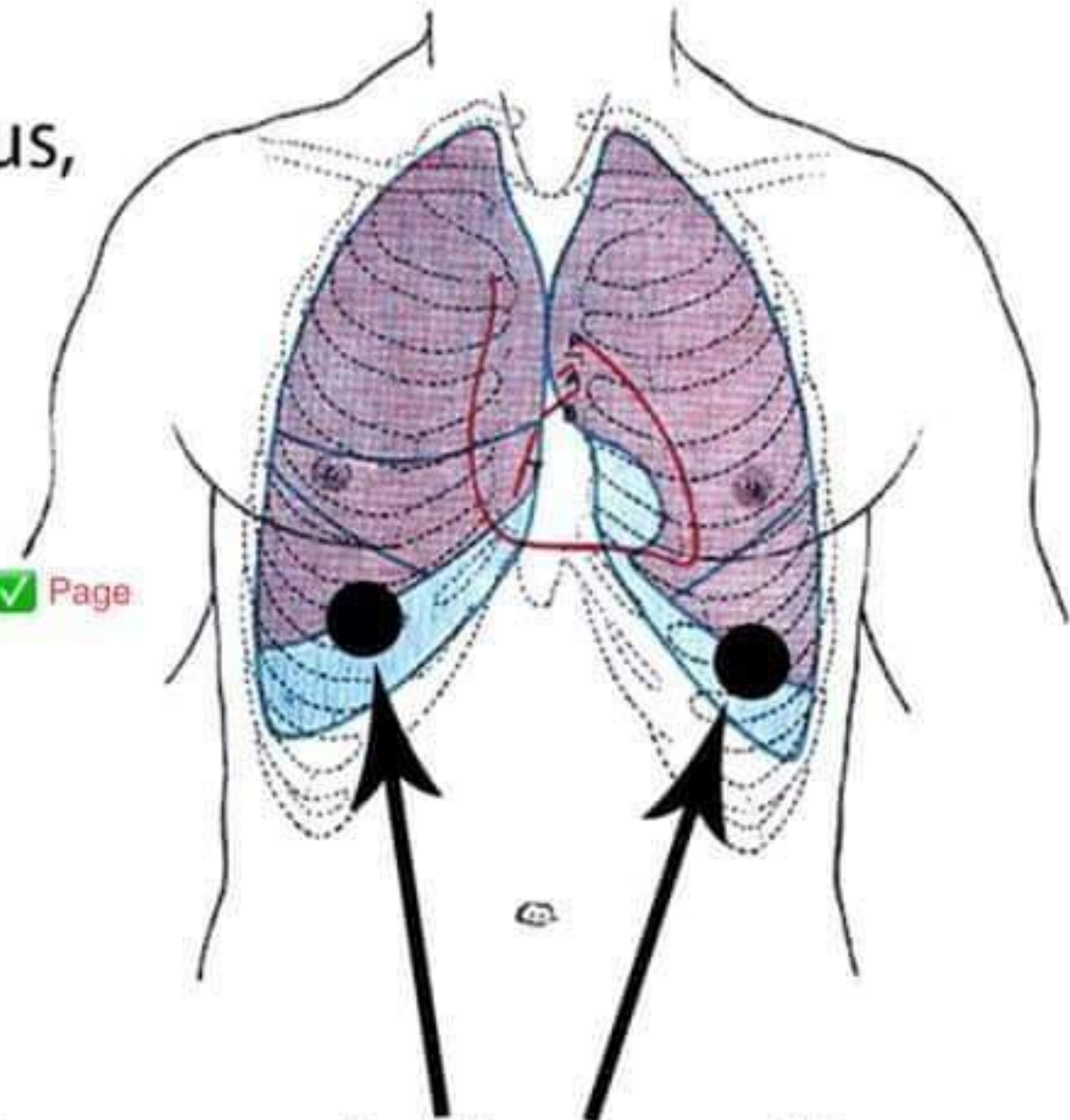
Child with croup - narrowing of the trachea



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Fine crackles

- High-pitched, brief, discontinuous, popping lung sounds
- Sound like wood burning in a fireplace or cellophane being crumpled
- Usually start at the base of the lungs, where there is fluid in the lungs
- As fluid fills the lungs more, can be heard closer & closer to the top of the lungs

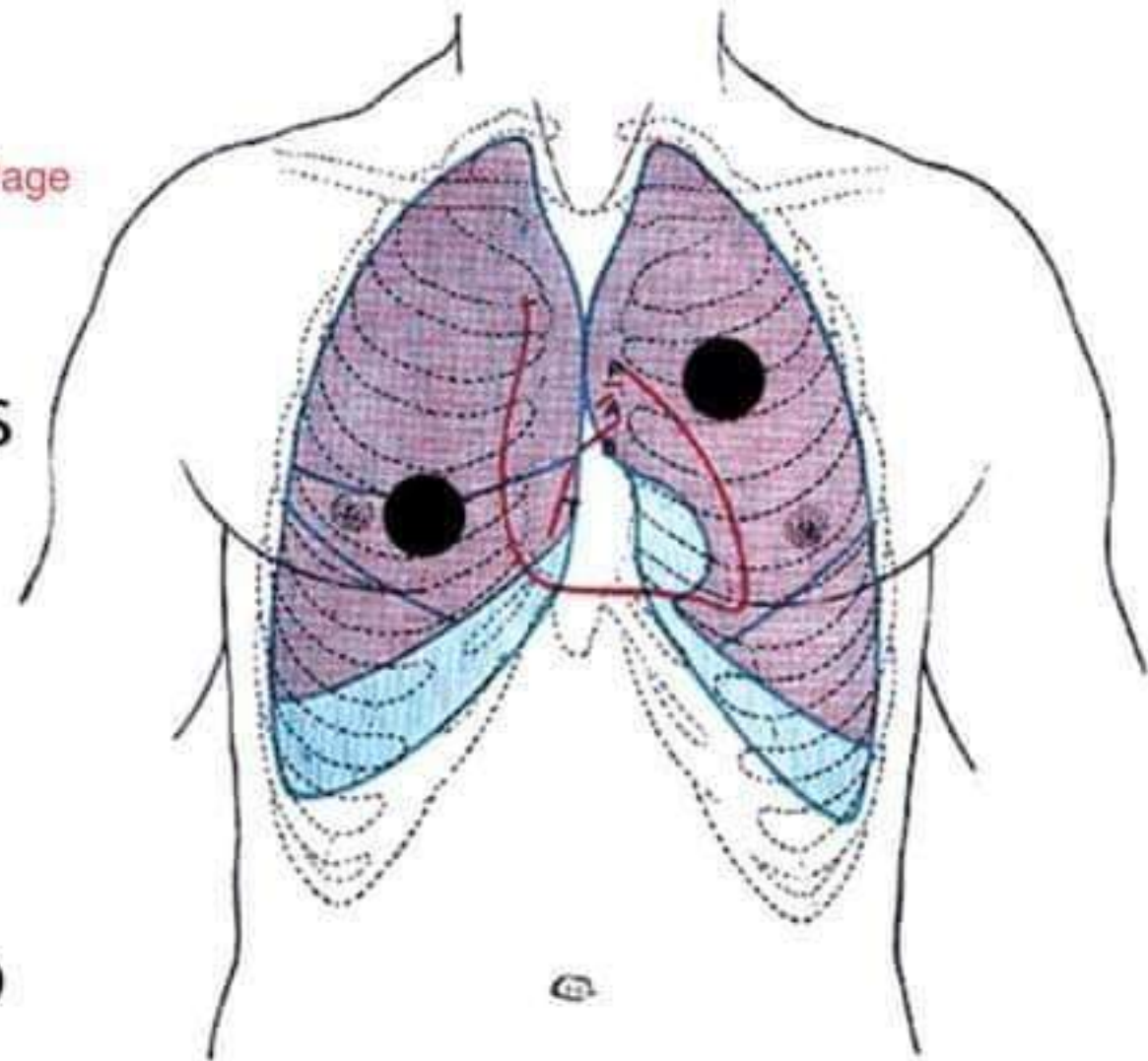


Listen to the bases of lungs

Coarse crackles

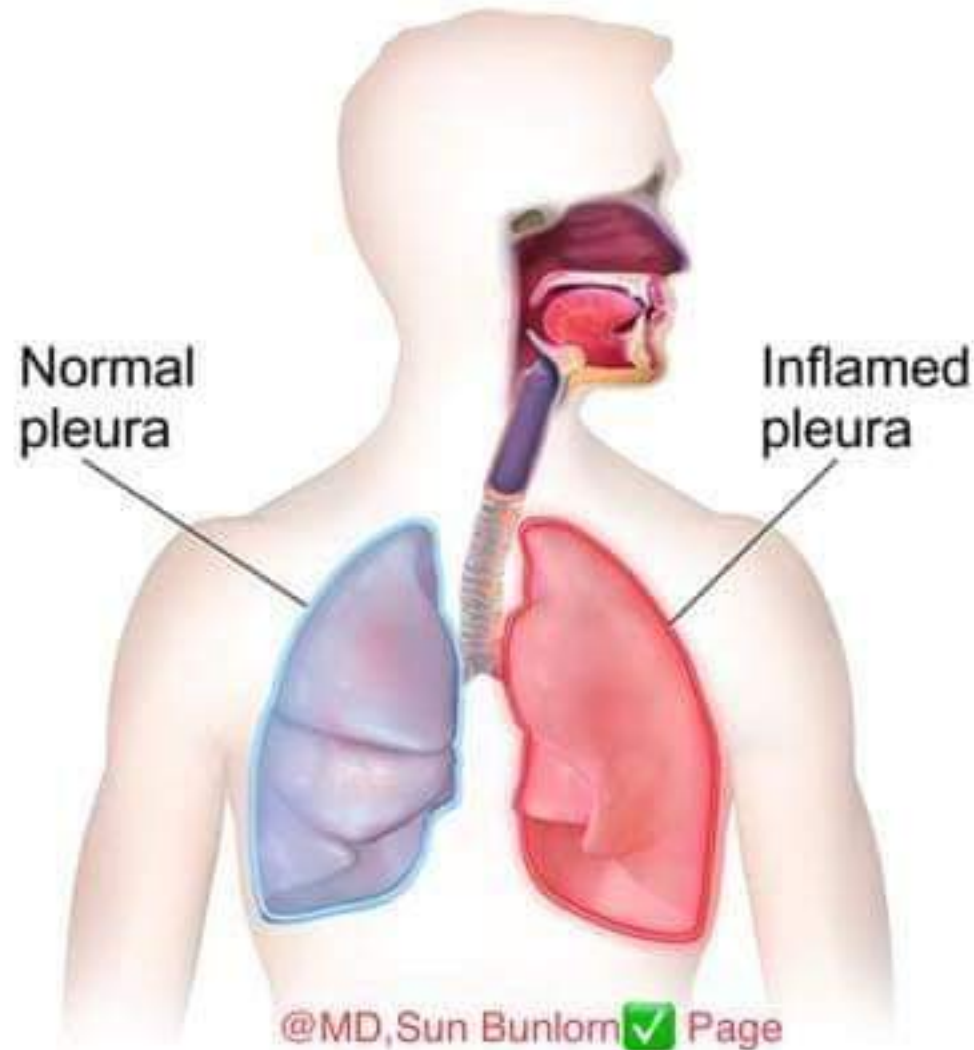
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- Coarse, rattling, crackling sounds
- louder, longer, and lower in pitch than fine crackles
- Described as a bubbling sound, as when pouring water out of a bottle or like ripping open Velcro



Heard over most of
anterior & posterior chest walls

Pleural friction rub

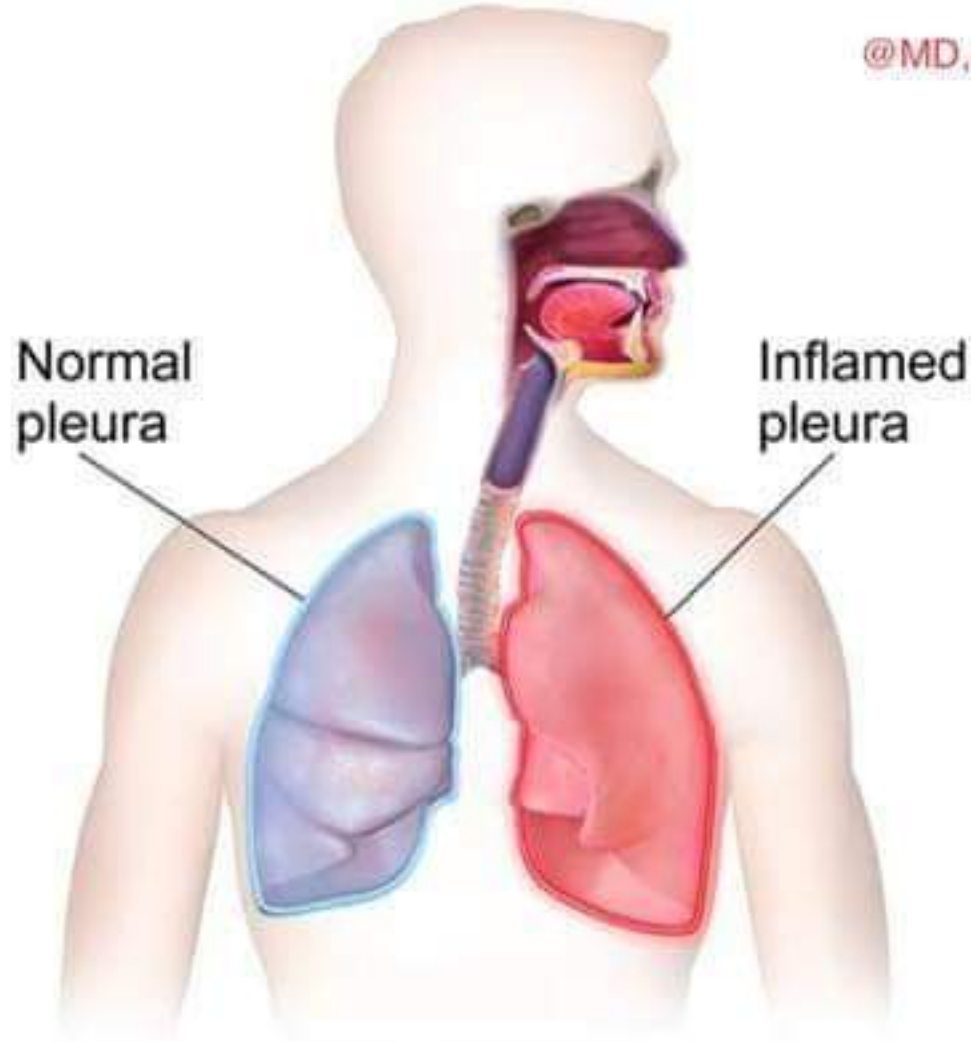


Pleurisy

- Two inflamed pleural surfaces rub against each other during respiration
- Heard in pleurisy
- May be continuous or broken, and creaking or grating
- The sound of walking on fresh snow or rubbing leather together
- Occurs every time the patient inhales and exhales

Pleural friction rub

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Pleurisy

- Pleural rubs come and go
- Not altered with coughing
- Can usually be localized to a specific location on the chest wall
- Will stop when the patient holds their breath

Remember...

If there is a loss of breath sounds in an area, it probably indicates a ***pneumothorax***, or collapsed lung, in which there is no air movement in that area.

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