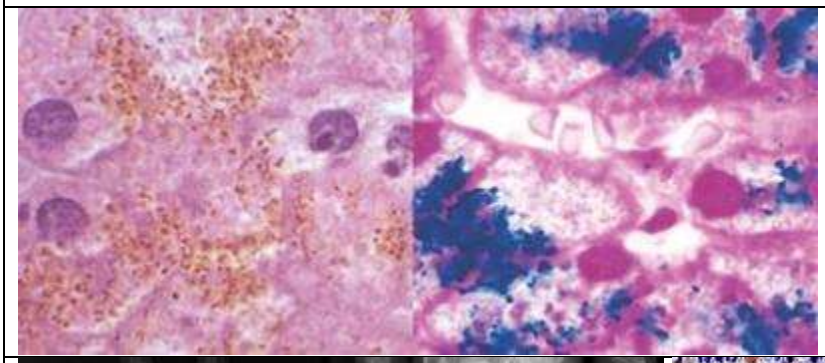
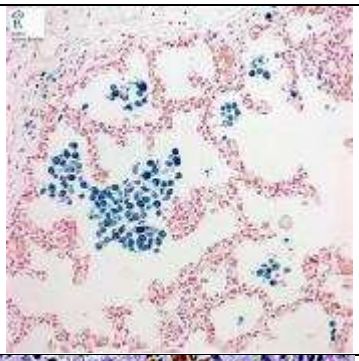
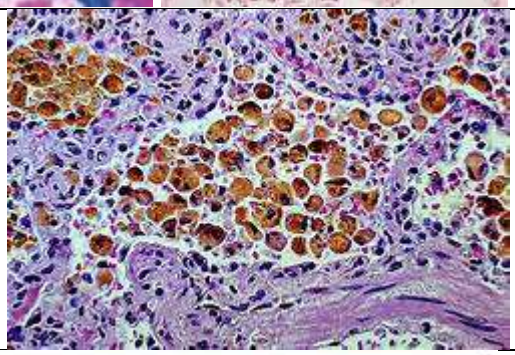
Haemosiderosis (silico-siderosis)			**II-6.94**		
***Lung*:**	Is enlarged Diffusely-fibrotic: Rusty-red (iron-deposition)				
Pleura	Is thickened				

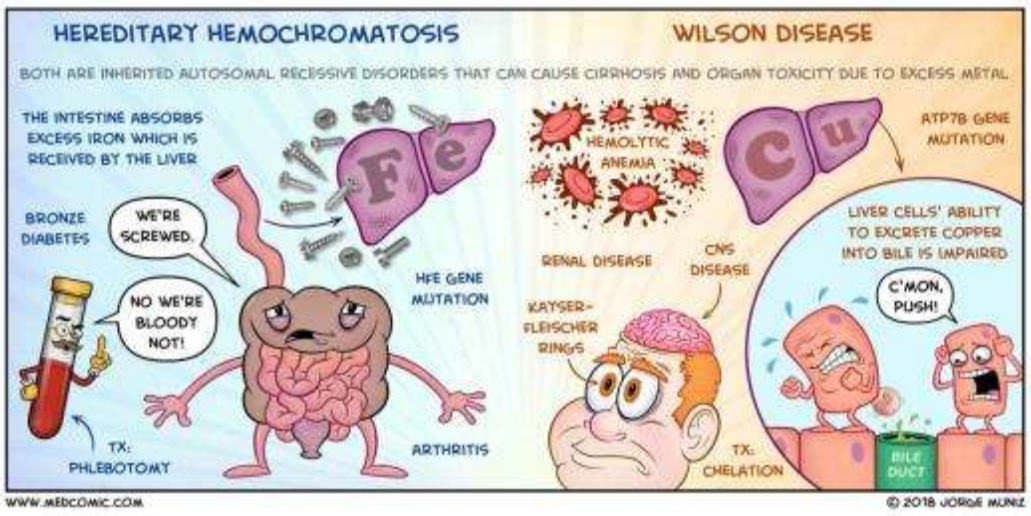
N.B.I:

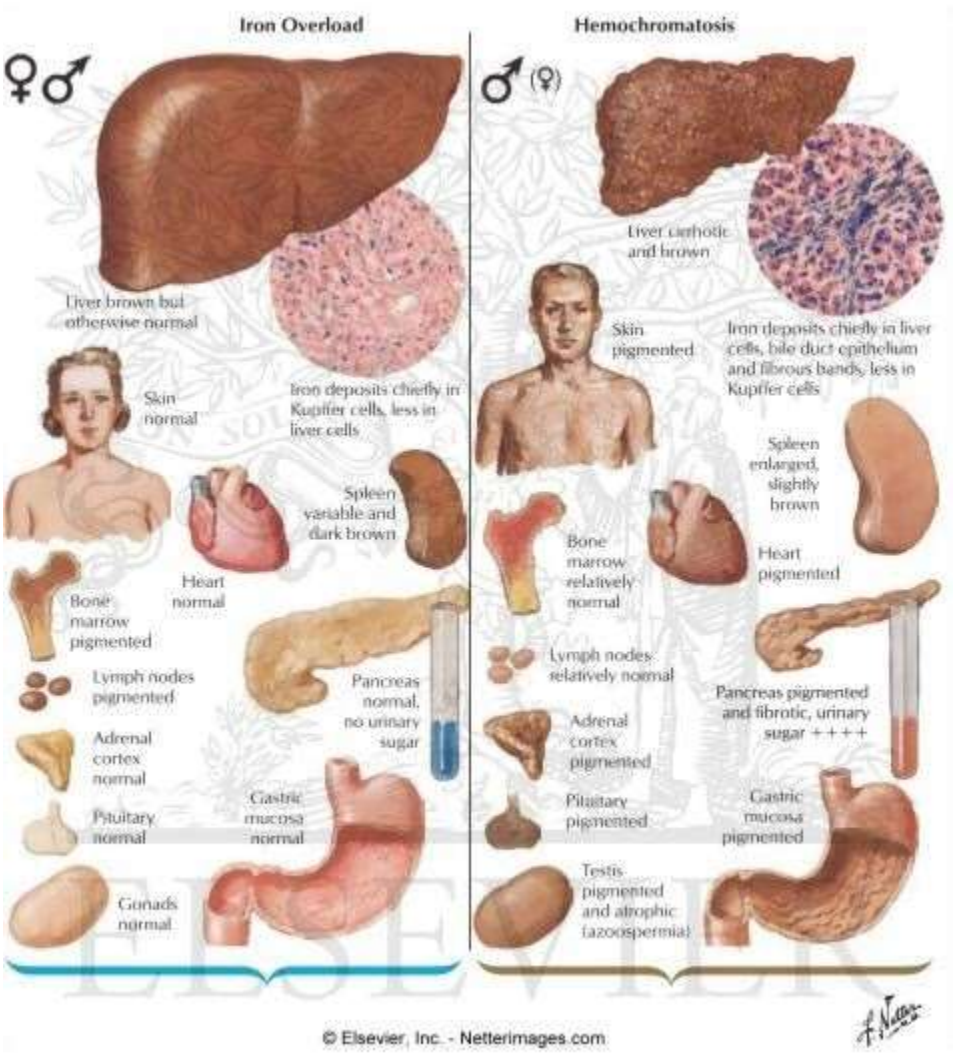
- Fibrosis, here, is more **diffusing than nodular**.
- The lesion is more in the **upper half of the lung.**
- The **Prussian blue reaction** for iron is positive in the brown-brick-red fibrosed areas.

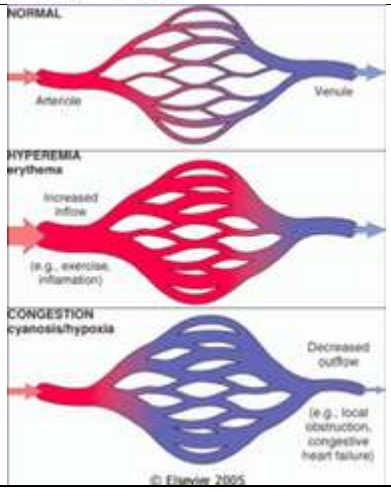


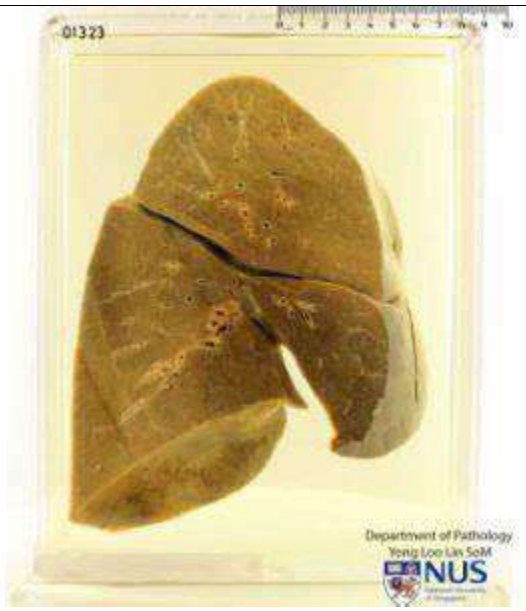


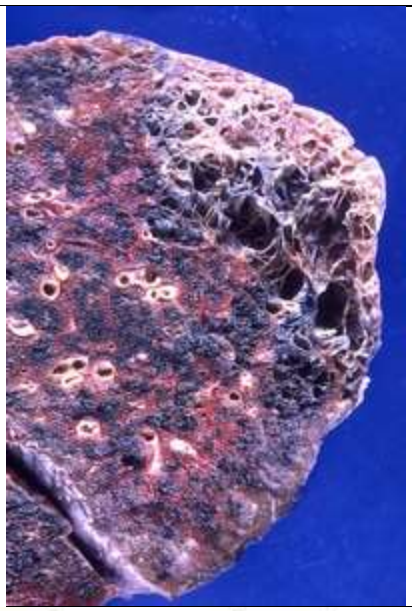


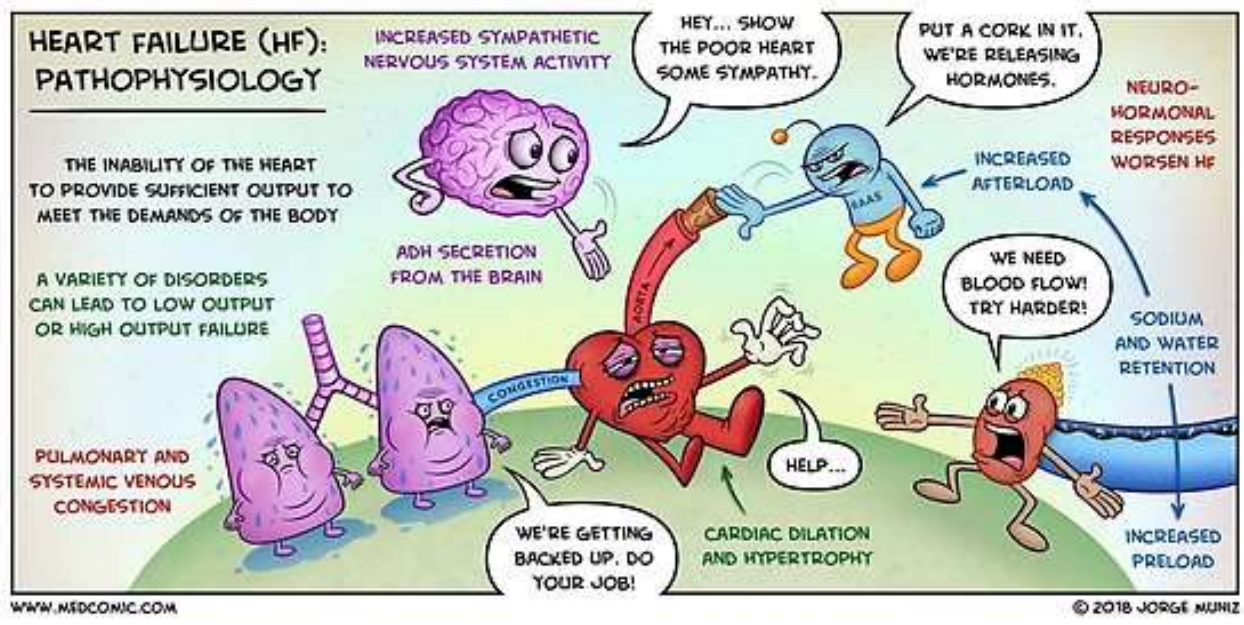












N.B. 2:

Other types of dust diseases

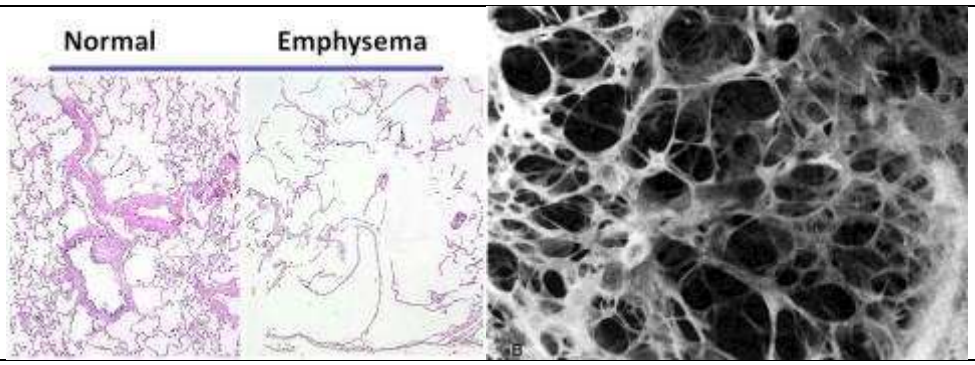
1) Beryllium Pneumonitis:

- In those working with fluorescent lamps→ berylliosis.
- **Acute pneumonitis:**
  - A diffuse infiltration of lungs with oedema and haemorrhage;
  - (No polymorphs; only plasma cells).
- **Delayed poisoning:**
  - Chronic granulomatous lesions, the condition has to be differentiated from:
    - Miliary tuberculosis.
    - Sarcoidosis.

2) Byssinosis: *It is inhalation of cotton fibres → little effect.*

3) Bauxite fibrosis (Shaver's disease): *Is caused by silica with aluminum.*

4) Baggastosis: *Is inhalation of cane-sugar fibres → little effect.*



Emphysema (chronic, obstructive = so-called hypertrophic)

Lung	Voluminous (hence the old term "hypertrophic").			
	Is pale especially at:	Apex Free borders		
	Crackles and pits on pressure Shows multiple bullae			
	Cut surface:	Is swollen in many parts Dry as a meshwork (spongy structure) Semi translucent		
		Shows:	• Bullae • Anthracotic areas	
Bullae and vesicles:	• Appear mainly at :	• Apex • Free borders • Anterior margin		
	• Spaces (empty except for air) • Are multiple (numerous) • Variable in size and in shape • Thin-walled • Feathery • Bloodless • Paler than the remaining lung tissue			

N.B. 1

Emphysema may be classified into:

1. Acute:

Vesicular (compensatory in origin).

Interstitial (traumatic in origin).

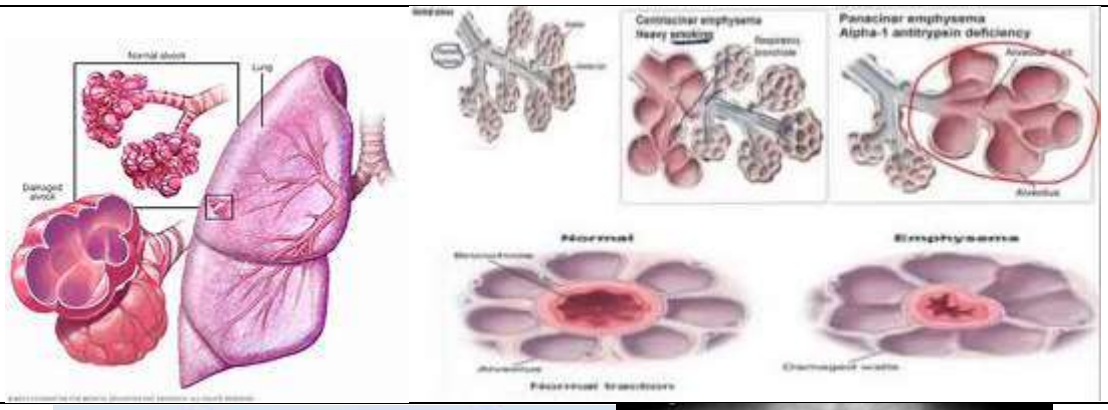
2. Chronic:

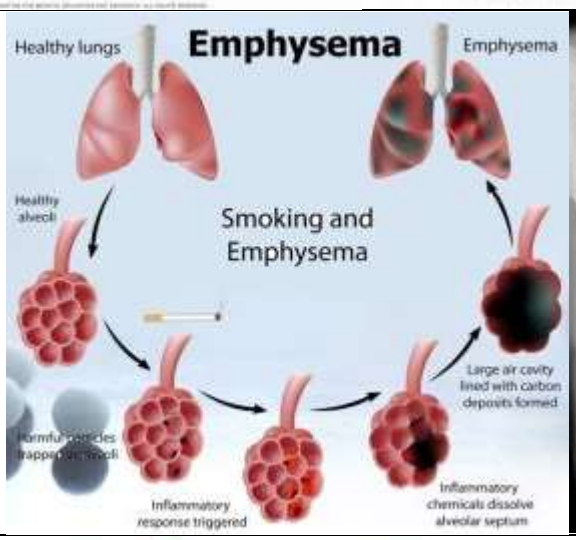
A) Generalized obstructive (so-called hypertrophic), due to loss of (or deficiency in) the elastic tissue of the lung and increase in the residual air content and the air trapped in the lung will inflate it.

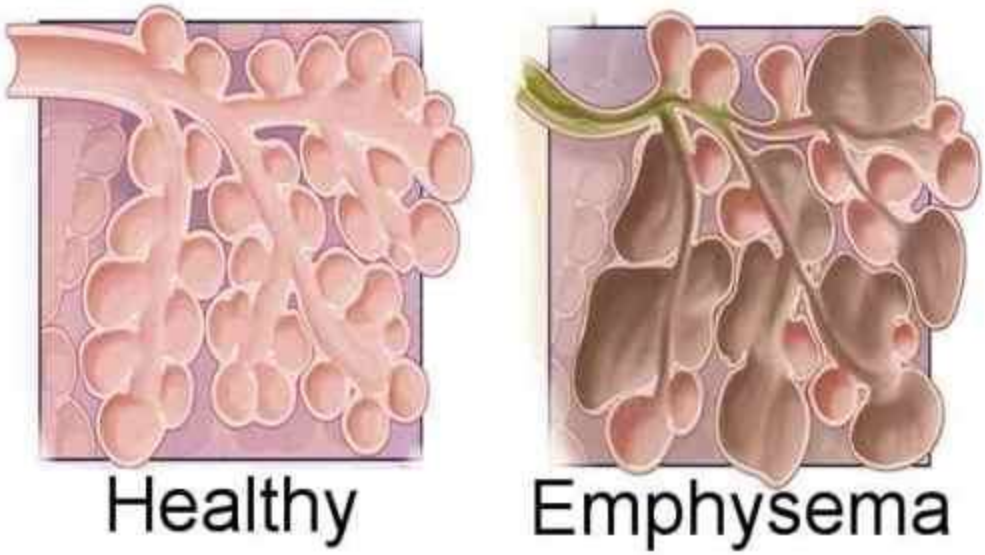
B) Localized (compensatory).

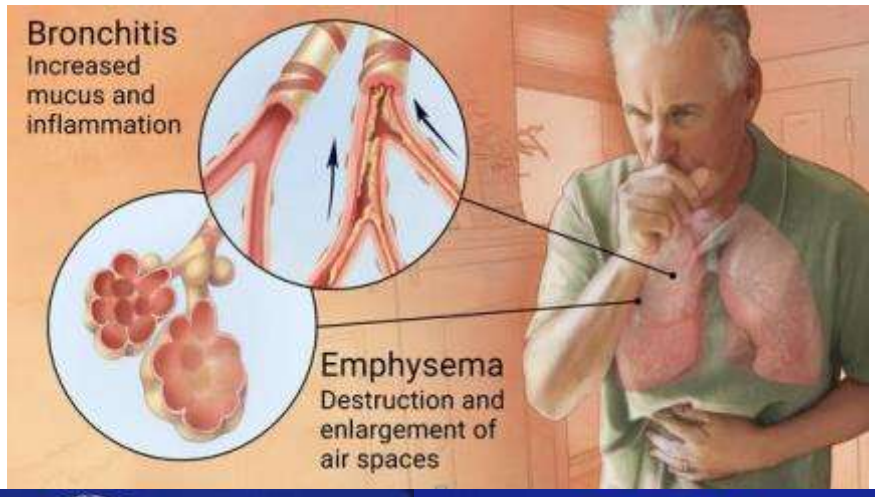
3. Senile:

Is also termed atrophic.


Normal alveoli
Lung
Damaged alveoli
Centriacinar emphysema
Heavy smoking
Panacinar emphysema
Alpha-1 antitrypsin deficiency
Alveolus
Alveolar duct
Normal
Emphysema


Healthy lungs
Emphysema
Healthy alveoli
Smoking and Emphysema
Large air cavity lined with carbon deposits formed
Inflammatory response triggered
Inflammatory chemicals dissolve alveolar septum


Healthy
Emphysema


Bronchitis
Increased mucus and inflammation
Emphysema
Destruction and enlargement of air spaces