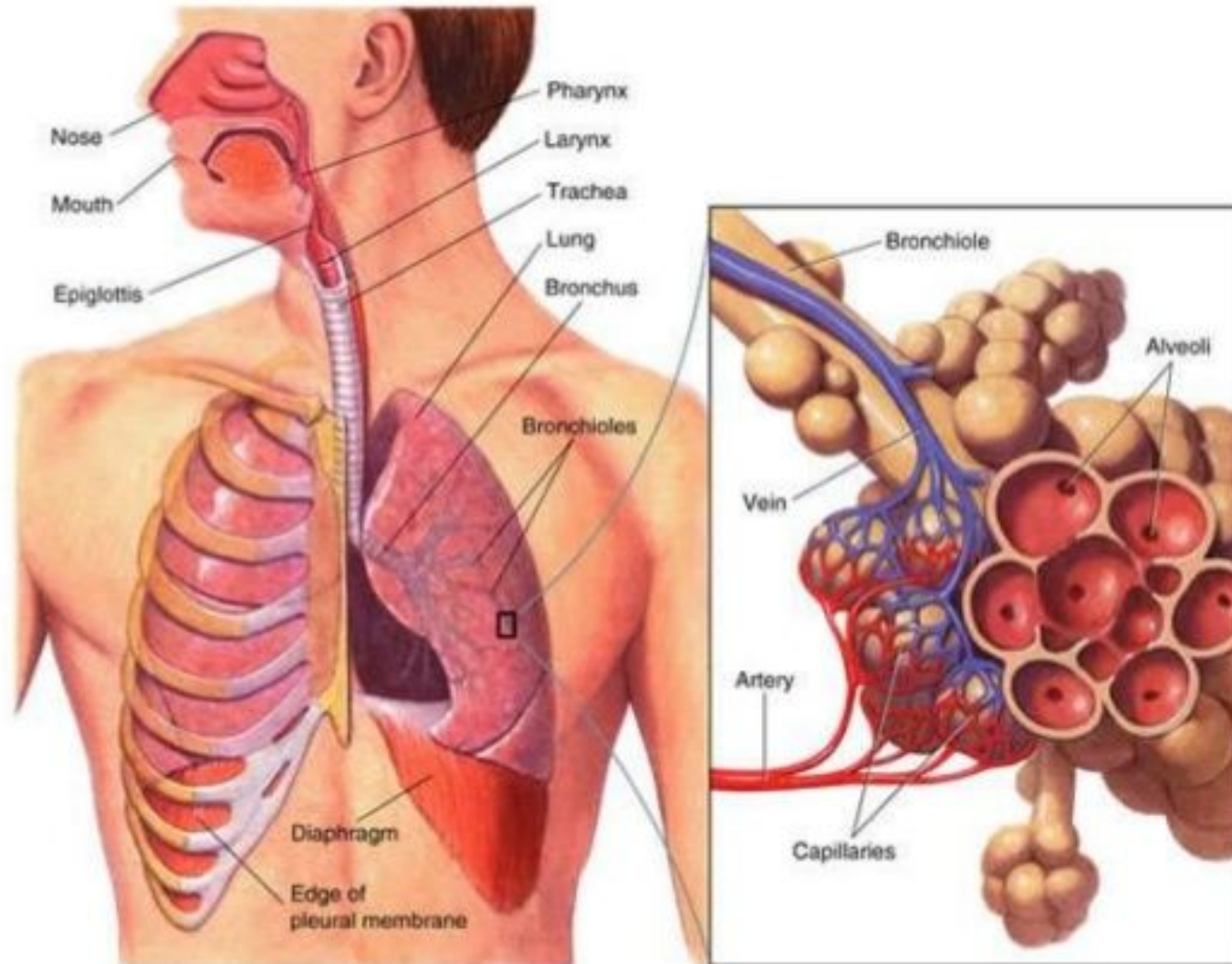


prevention of respiratory diseases



Human respiratory system consists of the nose, pharynx, larynx, trachea, bronchi and lungs with. Gas exchange is carried out in the alveoli of the lungs, and is normally directed to capture oxygen from inhaled air and isolating the external environment in the body formed of carbon dioxide. An adult at rest, makes an average of 14 breaths per minute, but the respiratory rate may undergo considerable fluctuations (from 10 to 18 per minute). Adult man making 15-17 breaths per minute, and a newborn child makes one breath per second.

RESPIRATORY SYSTEM



Physiology of respiration.

- ▶ The respiratory process - one of the unconditioned reflexes man, he manages the respiratory center, located in the brain stem, sending nerve impulses, which are transmitted to muscles involved in inhalation and exhalation. The diaphragm in response to these pulses is reduced and leveled, increase the volume of the chest cavity. With the reduction of the external intercostal muscles of the diaphragm is also declining, expanding the chest outward and upward. Therefore, the wall moving over the ribs lungs, leading to lung volume increase and decrease of internal pressure, as in the air enters the windpipe.

When the air reaches the alveoli, the gas exchange process begins. Lining the alveoli contains tiny capillaries. The thin walls of the capillaries and alveoli is the diffusion of gases - oxygen enters the blood, which then carries it to the body's tissues and carbon dioxide passes from the capillaries into the alveoli and excreted from the body during exhalation. It is believed that each lung contains about 300 thousand of the alveoli, the total surface of which is large enough to gas exchange took place very quickly and effectively.

As you exhale, the process is reversed. First, relax the intercostal muscles and the ribs fall down, then the diaphragm relaxes and reduces the volume of the chest cavity. The elastic fibers surrounding the alveoli and alveolar ducts fiber and bronchioles are reduced, reducing the amount of light, then the air is "ejected" from the body.



Diseases of the respiratory system

Angina - is an acute general infectious disease with a primary lesion of the tonsils. The inflammatory process can develop in other clusters lymphadenoid tissue pharynx and larynx - in the lingual, laryngeal, nasopharyngeal tonsils.

Bronchitis - a respiratory disease characterized by acute and chronic course of the disease. Bronchitis caused by viruses, bacteria, chemical and physical factors (cold, dry and hot air, sulfur dioxide, etc.). BACKGROUND bronchitis: cooling, smoking, chest deformity, impaired nasal breathing, chronic diseases.

Cough - one of the most common signs of respiratory disease. Occurs when Mucositis airway (larynx, bronchus) and lung tissue (pneumonia, tuberculosis, asthma) as well as with inhaled dust, corrosive gases, smoke, liquids and so on. Cough can have an allergic origin. Sometimes the cough occurs when the excitement, emotional stress.

Laryngitis - an inflammation of the larynx, occurs more often in acute respiratory viral infections, flu and other infectious diseases.

Rhinitis - an inflammation of the nasal mucosa. There are acute and chronic rhinitis. Acute rhinitis can be an independent disease, or a symptom of acute infectious diseases (influenza, measles, diphtheria, and others.). Predisposing factor is mainly hypothermia, sometimes the cause may be mechanical or chemical irritation. Acute rhinitis is always two-way.

Pneumonia - an infection of the lungs. Pneumonia - an infection of the alveoli, as a reaction to the introduction and proliferation of microorganisms in the respiratory tract. Microbes that most commonly cause pneumonia are staphylococci, virus, Haemophilus influenzae, mikoplazmahlamidii.

Cold - a SARS (acute respiratory viral infection) and ARI (acute respiratory infections, respiratory where the word means "airway"). In these diseases affects mainly the respiratory tract - the nasopharynx, trachea and bronchi.

