

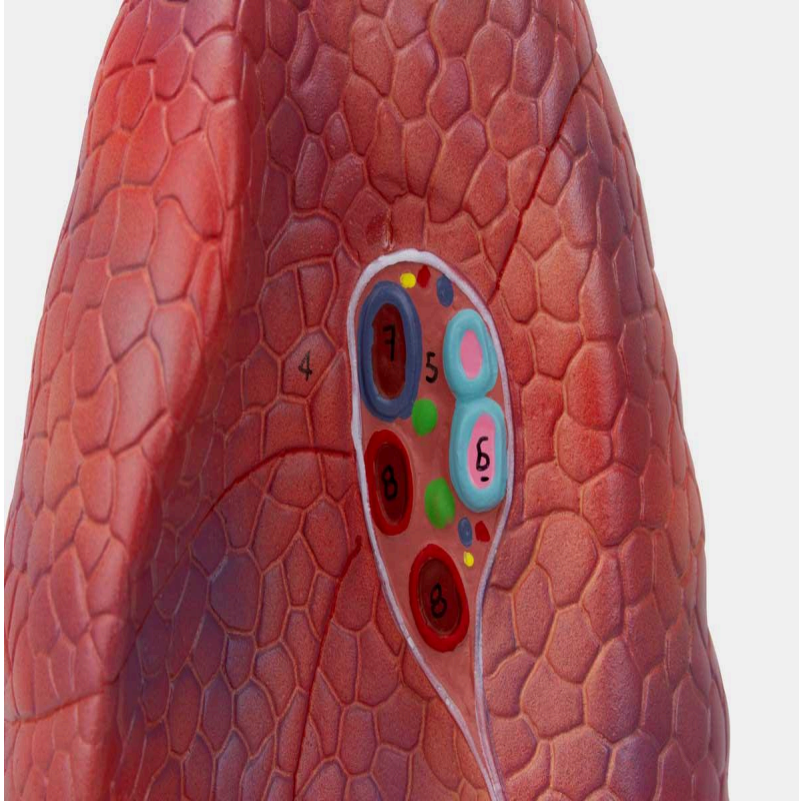


MG30887 | HUMAN LUNG NATURAL SIZE, 2 PARTS



Nasco
HEALTHCARE







This life-size anatomical model offers a realistic representation of human lungs, showcasing all their external features in detail. Divided into two parts and mounted on a stable base, it is an essential teaching tool for in-depth study of pulmonary anatomy.

Applications:

This model is an excellent tool to encourage learning and support various areas of healthcare. It is ideal for students and professionals to engage in comparative analysis of anatomical models, comparing and contrasting the structure of individual organs. Furthermore, it offers a robust platform for continuing education, providing opportunities to deepen knowledge in anatomy, physiology, and pathophysiology.

Technical Differentiators:

- * Life-size representation of human lungs.
- * Model composed of 2 parts for an in-depth study of external features.
- * Manufactured with durable synthetic material, ensuring longevity and resistance.
- * Mounted on a base for stability and display.

3D Technology and Augmented Reality:

Our anatomical models offer an innovative visual complement through informative cards that activate 3D models viewable in augmented reality (A.R.). This exclusive interactive platform stimulates learning, allowing comparative analysis of anatomical structures and offering



opportunities for continuing education in anatomy, physiology, and pathophysiology.

Technical Specifications:

- * Scale: Life-size
- * Number of parts: 2
- * Material: Durable synthetic material
- * Mounted on base: Yes

Main Structures:

Right lung: The right lung is larger and heavier than the left, divided into three lobes (superior, middle, and inferior) by two fissures (oblique and horizontal). It has a slightly larger capacity due to the absence of the cardiac notch that accommodates the heart.

Left lung: The left lung is smaller and lighter than the right, divided into two lobes (superior and inferior) by a single oblique fissure. It has the cardiac notch on its mediastinal surface to accommodate the heart and a prominent structure called the lingula, which is an extension of the superior lobe.

Superior lobe: It is the highest portion of each lung. In the right lung, it is separated from the middle lobe by the horizontal fissure and from the inferior lobe by the oblique fissure. In the left lung, it is separated from the inferior lobe only by the oblique fissure.

Middle lobe: Present only in the right lung, this lobe is located between the horizontal fissure (superiorly) and the oblique fissure (inferiorly).

Inferior lobe: It is the most voluminous portion of both lungs, occupying most of the lung base. It is separated from the superior lobe (and the middle lobe in the right lung) by the oblique fissure.

Oblique fissure: A prominent anatomical division that separates the superior lobe from the inferior lobe in both lungs. In the right lung, it also separates the middle lobe from the inferior lobe.

Horizontal fissure: A fissure present only in the right lung, which separates the superior lobe from the middle lobe.

Pulmonary hilum: A wedge-shaped depression on the mediastinal surface of each lung, through which the structures that form the root of the lung, such as main bronchi, pulmonary vessels, and nerves, enter and exit.

Pulmonary artery: A blood vessel that carries deoxygenated blood from the right ventricle of the heart to the lungs, where gas exchange occurs. It accompanies the bronchi within the



lung.

Pulmonary vein: Blood vessels that carry oxygenated blood from the lungs back to the left atrium of the heart. There are generally two pulmonary veins for each lung, a superior and an inferior.

Other structures can be verified directly on the physical piece or in the interactive 3D model.

Smart Tags:

Designed to provide comprehensive training in the healthcare field, with interactive simulations covering Lung exams. This solution assists in the development of diagnostic skills in different clinical scenarios, allowing professionals and students to explore and enhance their skills with greater safety and accuracy.

Lung sound recognition: Recognize 15 lung sounds and breathing pattern analysis.

- Agonal Breathing
- Asthma Wheezing
- Bronchial
- Bronchovesicular
- Crackles - Coarse
- Crackles - Fine
- Crackles - Pulmonary Edema
- Crackles - Bronchiectasis
- Death Rattle
- Inspiratory Stridor
- Pleural Rubs
- Rhonchi - Low-Pitched Wheezes
- Vesicular - Normal
- Wheeze
- Wheeze-COPD

Virtual Patient Monitor: Provides an immersive and realistic training environment for healthcare students. It allows instructors to customize parameters for various vital signs, empowering students to interpret signals, develop critical thinking, and enhance their clinical reasoning skills through realistic scenarios.

Customizable Vital Signs

- Blood Pressure
- SpO2
- Heart Rate

ECG Interpretation: Train on 18 diverse ECG scenarios, including: Atrial Fibrillation, Ventricular Tachycardia and Heart Blocks. The monitor also simulates synchronized pulses with ECG for truly realistic cardiology training.



ECG Patterns

- Sinus Rhythm
- Atrial Extrasystole
- Atrial Flutter
- Atrial Fibrillation
- Paroxysmal Supraventricular Tachycardia (PSVT)
- Ventricular Extrasystole
- Ventricular Tachycardia (VT)
- Ventricular Fibrillation (VF)
- First-Degree Atrioventricular Block (AVB)
- Second-Degree Atrioventricular Block
- Third-Degree Atrioventricular Block (Complete Block)
- Long QT Syndrome
- ST Segment Elevation
- ST Segment Depression
- T Wave Inversion
- Left Ventricular Hypertrophy (LVH)
- Right Ventricular Hypertrophy (RVH)
- Wolff-Parkinson-White Syndrome (WPW)

Breathing Patterns

- Normal
- Dyspnea
- Apnea
- Cheyne-Stokes
- Biot
- Kussmaul

About Anatomical Models:

They are developed with resin replication technology, addressing the scarcity of natural anatomical pieces for teaching and research. They present all the essential morphological characteristics with excellent cost-benefit, resistance, manual painting, and numbering for precise identification of structures.

List of all visible structures:

- Superior lobe
- Oblique fissure
- Costal surface
- Inferior lobe
- Apex of the lung



- Left lung
- Lingula
- Cardiac notch
- Mediastinal surface
- Pulmonary hilum
- Pulmonary artery
- Pulmonary vein
- Pulmonary vein
- Bronchi
- Pulmonary ligament
- Bronchi
- Pulmonary hilum
- Pulmonary artery
- Pulmonary vein
- Pulmonary vein
- Mediastinal surface
- Superior lobe
- Horizontal fissure
- Middle lobe
- Oblique fissure
- Inferior lobe
- Costal surface
- Apex of the lung
- Right lung