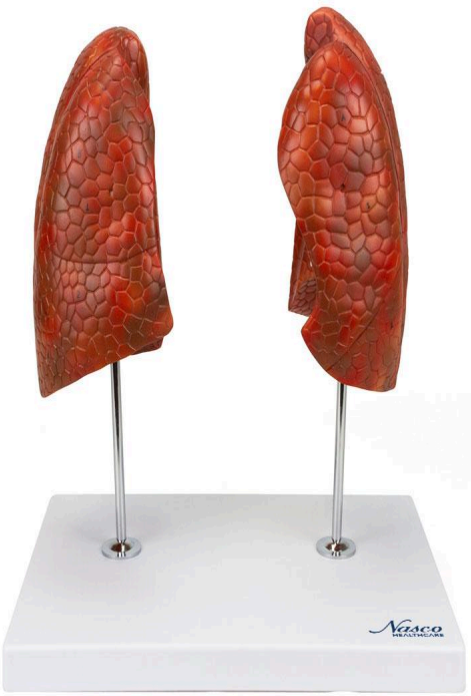
MG29786 | HUMAN LUNG NATURAL SIZE, 4 PARTS

Nasco
HEALTHCARE



This life-size, 4-part dismountable anatomical lung model offers a detailed representation of the lung structure and hilum in a frontal section. It includes both lungs, their lobes (3 on the right and 2 on the left), the bronchial tree, pulmonary arteries and veins, the hilum, lymph nodes, and the impressions of the azygos vein, aorta, and aortic arch, and is mounted on a base for easy study.

Applications:
Ideal for in-depth study of pulmonary anatomy in medical, nursing, and other health science courses. Perfect for demonstrations in classrooms, anatomy labs, and clinics, assisting in understanding the structural and functional relationships of the lungs and their adjacencies.

Technical Differentiators:
Life-size representation with high anatomical fidelity. Dismountable into 4 parts for detailed study of internal structures. Features a clear frontal section of the lung and hilum. Includes visualization of both lungs, their lobes, bronchial tree, pulmonary vessels, lymph nodes, and important vascular impressions. Mounted on a sturdy base for stability and display.

3D Technology and Augmented Reality:
Our anatomical models offer an innovative visual complement through information cards that activate 3D models viewable in augmented reality (AR). 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: 4 (dismountable)
* Mounting: On base

Main Structures:

right pulmonary artery: The right pulmonary artery is a large blood vessel that originates from the pulmonary trunk, emerging from the right ventricle of the heart. It carries deoxygenated blood to the right lung, where gas exchange occurs in the alveoli.

right superior pulmonary vein: The right superior pulmonary vein is one of the vessels that carries oxygenated blood from the upper and middle lobes of the right lung back to the left atrium of the heart.

right inferior pulmonary vein: The right inferior pulmonary vein collects oxygenated blood from the lower lobe of the right lung and drains it into the left atrium of the heart, completing the cycle of the pulmonary circulation.

left lung: The left lung is one of the two main organs of respiration, located in the thoracic cavity. It is slightly smaller than the right lung due to the presence of the heart and is divided into two lobes: upper and lower.

left upper lobe: The left upper lobe is the upper portion of the left lung, responsible for gas exchange in its area. It is separated from the lower lobe by the oblique fissure.

left lower lobe: The left lower lobe is the lower and larger portion of the left lung, playing a crucial role in blood oxygenation. It is separated from the upper lobe by the oblique fissure.

right upper lobe: The right upper lobe is the highest portion of the right lung, contributing significantly to respiratory function. It is bounded inferiorly by the horizontal fissure.

right lung: The right lung is the larger and heavier of the two lungs, located in the thoracic cavity. It is divided into three lobes (upper, middle, and lower) by two fissures and is responsible for oxygen uptake and carbon dioxide release.

right middle lobe: The right middle lobe is a relatively small portion of the right lung, located between the upper and lower lobes. It is bounded by the horizontal fissure superiorly and the oblique fissure inferiorly.

right lower lobe: The right lower lobe is the largest part of the right lung, located in the lowest portion. It is separated from the middle and upper lobes by the oblique fissure, being vital for respiratory function.

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 parts 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:

- right pulmonary artery
- right superior pulmonary vein
- right inferior pulmonary vein
- left lung
- left upper lobe
- left lower lobe

- right upper lobe
- right lung
- right middle lobe
- right lower lobe