



# The Lung

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The lungs are ingeniously constructed to carry out their cardinal function, the exchange of gases between inspired air and blood. Developmentally, the respiratory system is an outgrowth from the ventral wall of the foregut. The midline trachea develops two lateral outpocketings, the lung buds. The lung buds eventually divide into branches called lobar bronchi, three on the right and two on the left, thus giving rise to three lobes on the right and two on the left.

The lobar bronchi allow passage of air from the outside into the lung. They have firm cartilaginous walls that provide mechanical support, and are lined with columnar ciliated epithelium with abundant subepithelial glands that produce mucus, which impedes the entry of microbes. The mainstem bronchus is more vertical and directly in line with the trachea. Consequently, aspirated foreign materials, such as vomitus, blood, and foreign bodies, tend to enter the right lung more often than the left. The right and