

How does air reach the lungs?

O-levels: Grade 9,10 and 11

Do you know how air reaches the lungs in the human body? In this lesson we will discuss, what path does the air take to reach the lungs.

How does air reach the lungs?

1. The Nose:

Air usually enters our body through the two external nostrils. The walls of the nostrils are covered with a fringe of hairs. The two nostrils lead to the nasal passages which are lined with a moist substance, known as mucous. The dust, bacteria and germs in the air are blocked by the hairs in the nostrils and the mucous in lining the nasal passages. As air passages through the nasal passages it is warmed and moistened. The air then passes into the pharynx, from it here it passes into the larynx and then into your trachea through an opening known as glottis.

2. Trachea:

The trachea (windpipe) is supported by C-shaped rings of cartilage. This cartilage keeps the lumen of the trachea open. The membrane (surrounding wall) next to the lumen is the epithelium.

There **two types** of cells in epithelium:

- The gland cells which secrete mucus to trap dust particles and germs.
- The ciliated cells which are hair-like, known as cilia. They are on the surfaces of the epithelium. The cilia push the dust-trapped mucus up the trachea.

3. Bronchi and Bronchioles:

The air then passes into the bronchi, two tubes which divide the trachea. Each bronchi carries air into the lung. Each bronchus divides repeatedly, causing rise to