

## How does the nose work?

# The nasal mucosa

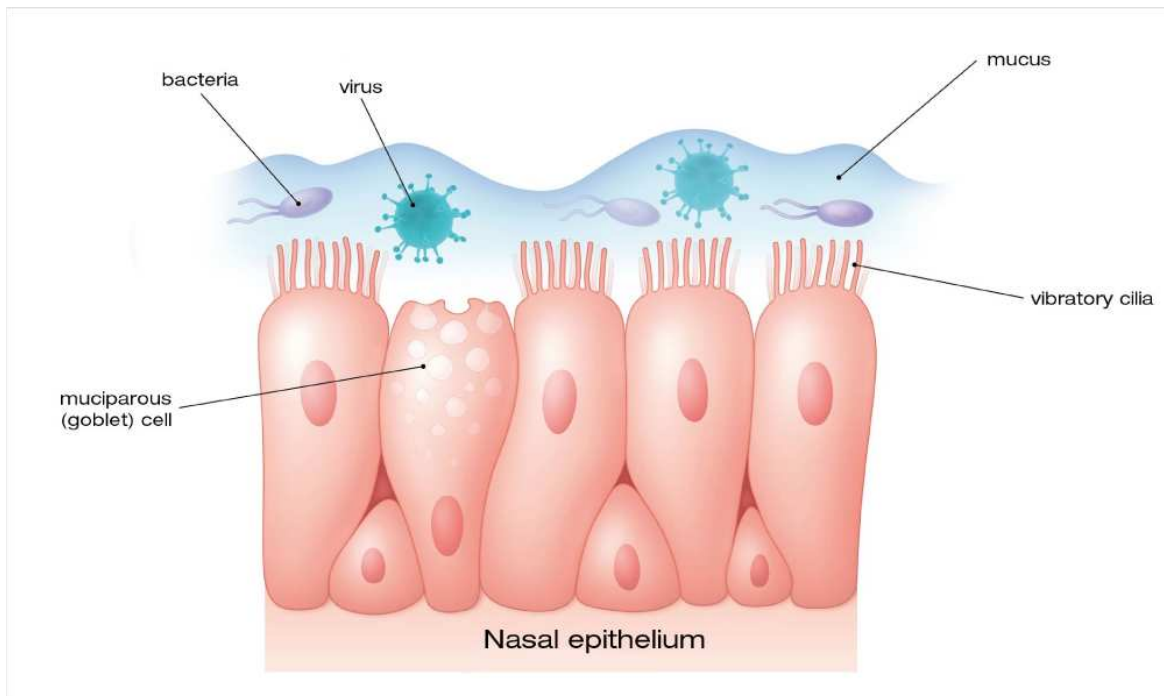
The nasal cavities are lined by the nasal mucous membrane, or mucosa. The surface, or epithelium, contains the cells which produce mucus and the ciliated cells, covered with fine hairs called vibrating cilia (see illustration, below). Underneath the epithelium is a dense network of capillary blood vessels.

The nasal mucosa is essential to correct operation of the entire respiratory system. The nose heats and humidifies more than 12,000 liters of air every day.

The nose works as it does thanks to various defensive mechanisms: its epithelium and dense network of capillaries, its mucus, the vibrating cilia which move the mucus, the cells of the immune system and many substances capable of combating bacteria and viruses and harmful substances.

The nose is the respiratory system's first line of defense.

## The mucosa is the nose's first line of defense



**The mucus traps harmful substances (viruses, bacteria, dust, pollens, etc.) on the surface of the mucosa and the vibratory cilia move the mucus toward the pharynx to eliminate it.**