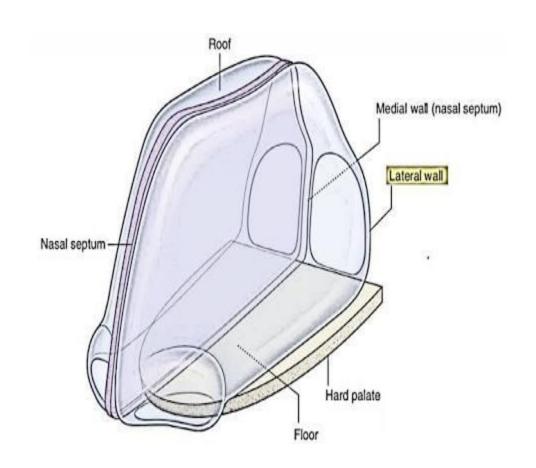
# NASAL CAVITY & TRACHEA

# Nasal cavity

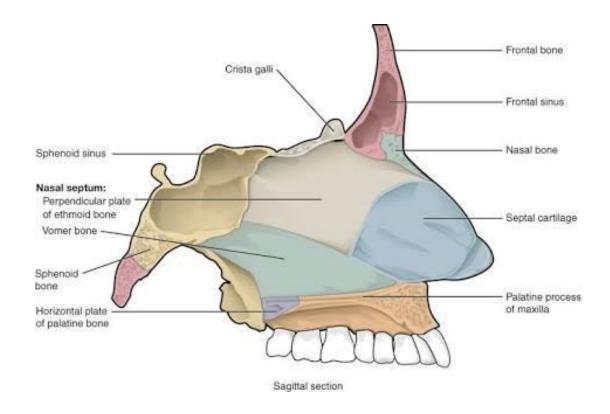
- Roof
- Floor
- Medial wall
- Lateral wall



- The nasal cavity is an irregular space between the roof of the mouth and the cranial base. It is wider below than above.
- The nasal cavity communicates with the frontal, ethmoidal, maxillary and sphenoidal paranasal sinuses
- Nasal cavity opens into the nasopharynx through a pair of oval openings, the posterior nasal apertures or choanae.

## Roof

- 1. Ethmoid bone
- 2. Frontal bone
- 3. Nasal bone
- 4.Sphenoid bone



## Floor

Maxilla bone Palatine bone

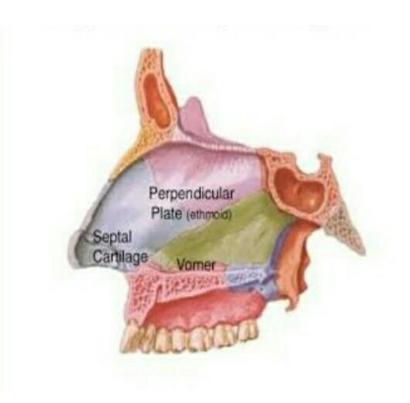
## Medial wall

#### Bony part

- Vomer bone
- Ethmoid bone

### Cartilaginous part

- Septal cartilage
- Inferior nasal cartilage



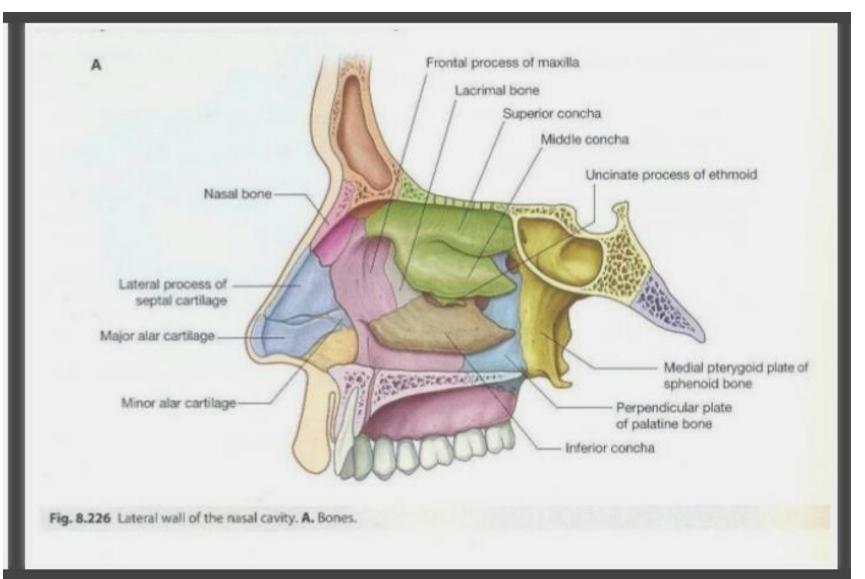
## Lateral wall

#### **Bony part**

- Nasal bone
- Maxilla bone
- Lacrymal bone

#### cartilaginous

- Superior nasal cartilage
- Inferior nasal cartilage



## Dig:Letral wall off nasal cavity

• BLOOD SUPPLY

- Sphenopalatine artery
- Facial artery

VENOUS
 DRAINAGE

- Facial vein
- Pharyngeal plexus of vein
- Pterygoid plexus of vein

• LYMPHATIC DRAINAGE

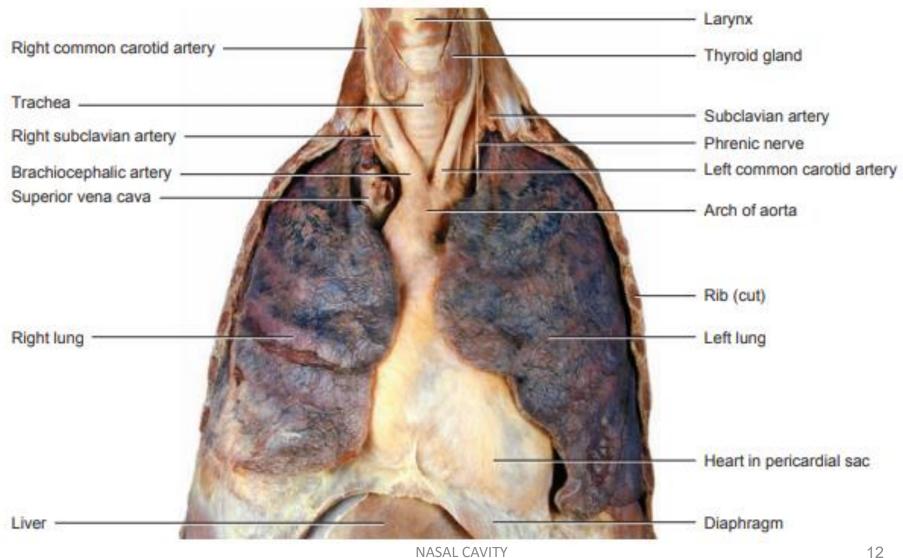
- Submendibular node
- Deep cervical node

# Nerve supply

Olfactory nerve

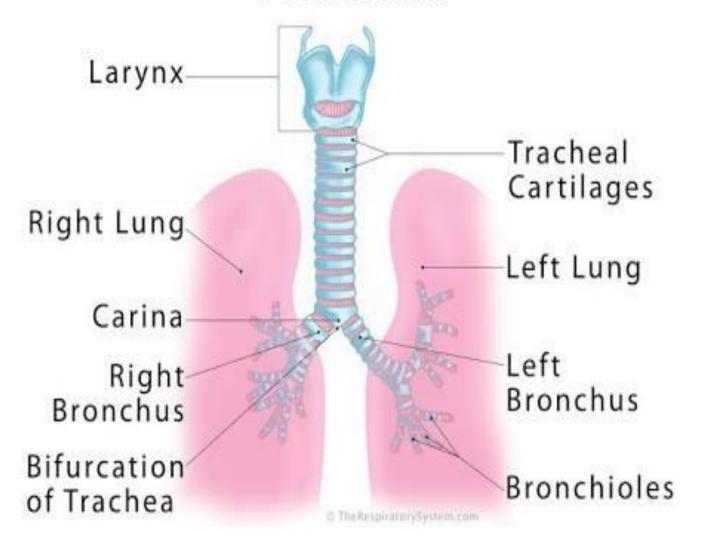
Trigeminal nerve.

# **TRACHEA**



#### trachea

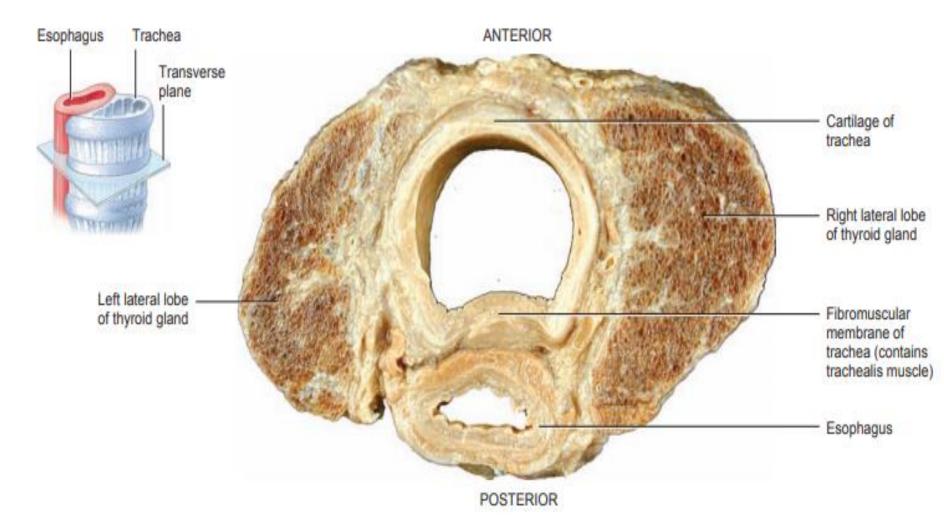
# Trachea



# Trachea / windpipe

- It is located anterior to the esophagus and extends from the larynx to the superior border of the fifth thoracic vertebra (T5), where it divides into right and left primary bronchi
- length; 12 cm long and 2.5 cm in diameter

• The 16–20 incomplete, horizontal rings of hyaline cartilage resemble the letter C, are stacked one above another, and are connected together by dense connective tissue. The open part of each C-shaped cartilage ring faces posteriorly toward the esophagus and is spanned by a fibromuscular membrane. Within this membrane are transverse smooth muscle fibers, called the trachealis muscle, and elastic connective tissue that allow the diameter of the trachea to change subtly during inhalation and exhalation, which important in maintaining efficient airflow.



 A triangular process known as carina is present in the last ring which hooks upward from the lower margin and surrounds the commencement of the two bronchi.

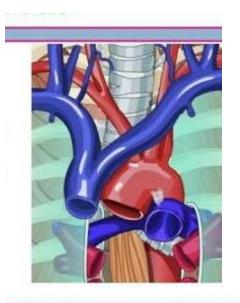
## Relations

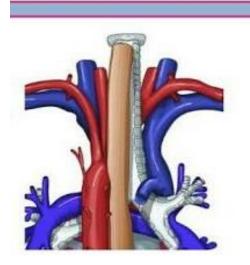
#### Anterior-

Brachiocephalic trunk
Left common carotid artery
Left brachiocephalic vein
Manubrium sterni
Remains of the thymus
Manubrium sterni
Sternohyoid and sternothyroid muscle

#### Posterior-

Oesophagus Vertebral column





Laterally-

## To the right

- 1. Right lung and pleura
- Right brachiocephalic vein and SVC, azygos vein
- 3. Right vagus nerve

To the left side-

- 1. Arch of aorta, left common carotid A, left subclavian A
- 2. Left recurrent laryngeal N

# **Blood supply**



- ☐ Upper part of trachea
  Inferior thyroid artery
- ☐ lower part

Branches of the bronchial artery



Left brachiocephalic vein



Pretracheal and paratracheal nodes

## NERVE SUPPLY

The anterior and posterior pulmonary plexuses innervate the trachea and the bronchi. The two plexuses are interconnected. The trachea innervated by branches of the vagi, recurrent laryngeal nerves and sympathetic trunks

trachea 2

