

The Nose and Nasal Cavities

In an effort to aid Health Information Management Coding Professionals for ICD-10, the following anatomy tip is provided with an educational intent.

The Nose:

The two nostrils of the nose lead to nasal cavities that are separated by the nasal septum. Consisting partially of bone and partially of cartilage; makes the nasal septum very flexible. The nasal cavities play a very important role in breathing by using their numerous blood vessels to warm the air before it gets closer to entering the lungs. In addition, the lining of the nasal cavities secretes mucous that traps dust and other particles, preventing these foreign objects from entering the lungs. The mucus secreted in the nasal cavities also serves to moisten the air before it enters the lungs.

Four Pair of Paranasal Sinuses:

The paranasal sinuses are the hollow spaces formed by the bones that surround the nose. The sinuses are lined with a mucous membrane, containing cilia to trap unwanted air particles, which they then move to the nasal cavity to be removed from the body. When the small openings into the sinuses become blocked, they fill with fluid, which often results in infection

1. The ***maxillary sinuses*** are the largest of all. There is one on either side of the nose, beneath the cheekbones, above the teeth. They drain through one small opening directly into the nose.
2. The ***ethmoidal sinuses***. Are composed of small packets located behind the bridge of the nose between the eye sockets. Each is filled with small pockets containing thin-walled bone. The individual pocket has a small opening that drains into the nasal cavity.
 - 1) The ***frontal sinuses***. Are located above the eyes and over the nose, and drain into the nasal cavity by first draining into the ethmoid sinuses. Infection in the frontal sinuses is considered dangerous because it can lead to meningitis.
 - 2) The ***sphenoid sinuses***. Are very small cavities about the size of an apricot pit. They are very deep within the skull, behind the eyes, and drain into a small opening that opens into the very back portion of the nose

References

Clayman, Charles B. *The Human Body: an Illustrated Guide to Its Structure, Function, and Disorders*. London: Dorling Kindersley Pub., 1995. Print.
Walker, Richard. E. *guides: Human Body*. New York, NY: DK Pub., 2005. Print.
Walker, Richard. *Guide to the Human Body*. Buffalo, NY: Firefly Books, 2004. Print.

This Anatomy and Physiology tip sheet was developed by the CHIA Coding and Data Quality Committee as an educational resource 2012.
Copyright © California Health Information Association, 2012.