**Respiratory Notes**

I. Nasal Passages

 A) moistens the air

 B) Rich supply of thin-walled blood vessels warms the air – nose bleeds

 C) Mucus filters the air. Cilia push mucus back to the pharynx area where it is swallowed.

 -Cold weather makes cilia sluggish. Causes runny noses

II. Cleft palate - when the maxilla and palatine bones (hard palate) does not develop medially

 A) makes it hard to breathe, talk, or swallow

III. Pharynx – where food and water enter the “throat”

IV. Tonsils – lymphatic tissue that filters out bacteria

 A) tonsillitis – can cause people to breathe through their mouths so tonsils are removed

V. Larynx – “voice box”

 A) Vocal folds or cords – vibrate when air passes through them

 -opening between them is glottis, covered by the epiglottis

 B) Trachea – “windpipe” - leads to the lungs

 -c-shaped cartilage – allows it to expand as we swallow food and always keeps it patent or open

 1) Heimlich maneuver – pressure applied below xiphoid process

 2) Tracheostomy – whole in trachea, much mucus

 3) Cilia move mucus up to be swallowed – Smoking destroys the cilia – “smoker’s cough”

 -Cough reflex essential for smokers – does not work when we are unconscious

VI. Other facts about the Respiratory System

 A) Pleurisy – lack of fluid causes lungs to scrape against the wall of the rib cage

 B) Inspiration – caused by diaphragm contracting and flattening creating a partial vacuum which sucks air in

 -punctured lung causes inside and outside air pressures to be the same

 C) Expiration – when the diaphragm relaxes and pushes the air out

 D) Sounds

 1) Cough - glottis closes builds up pressure and glottis opens

 2) Sneeze – uvula closes off mouth forces air out of the nose

 3) Crying and laughing – short expirations

 4) Hiccups – diaphragm spasms, sound when inspired air hits vocal cords of closed glottis

 5) Yawn - deep inspiration ventilates all alveoli