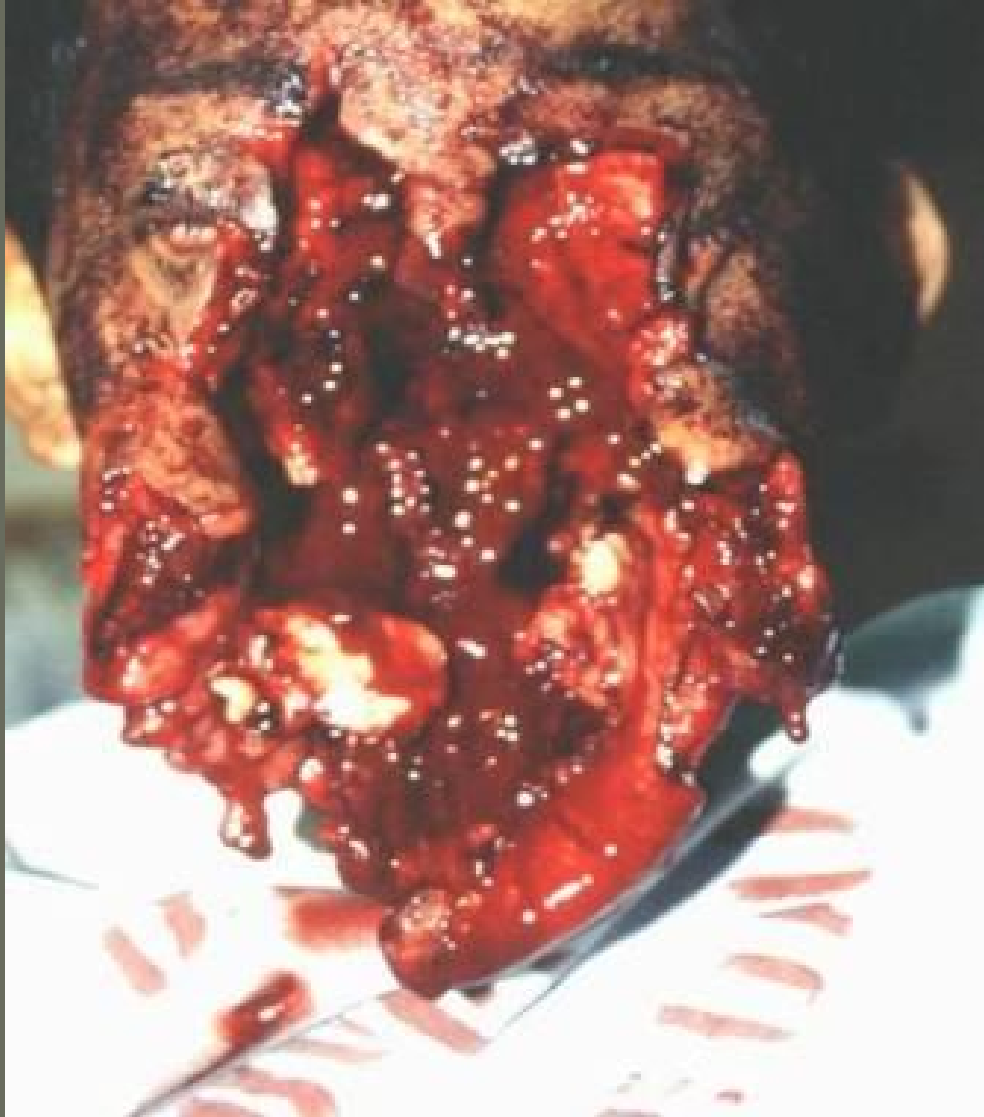
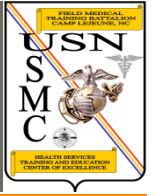




# MAINTAIN AIRWAY





# OVERVIEW



- Terminology
- Anatomy
- Signs & Symptoms
- Treatments



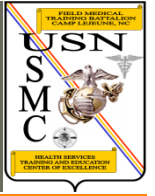
# LEARNING OBJECTIVES

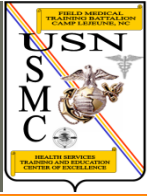
Please Read Your

Terminal Learning Objectives

And

Enabling Learning Objectives

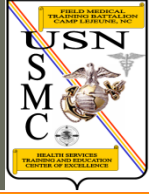




# TERMINOLOGY



# TERMINOLOGY



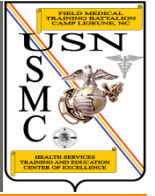
- PHARYNX – Muscle lined with mucous running from the back of the soft palate to the upper end of the esophagus; Divided into three sections:
  - Nasopharynx
  - Oropharynx
  - Hypopharynx
- NASAL SEPTUM – Separates left and right airways of nose
- NARES – External openings of nasal cavity

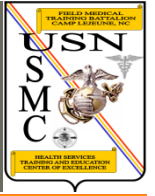


# TERMINOLOGY



- LARYNX (voicebox) – Cartilaginous box located above the trachea, containing vocal cords and muscles that make them work
- EPIGLOTTIS – Leaf-shaped structure that acts like a gate, directing air into the trachea and solids/liquids into the esophagus.
- TRACHEA (windpipe) – Main trunk of the system of tubes air passes to and from the lungs.

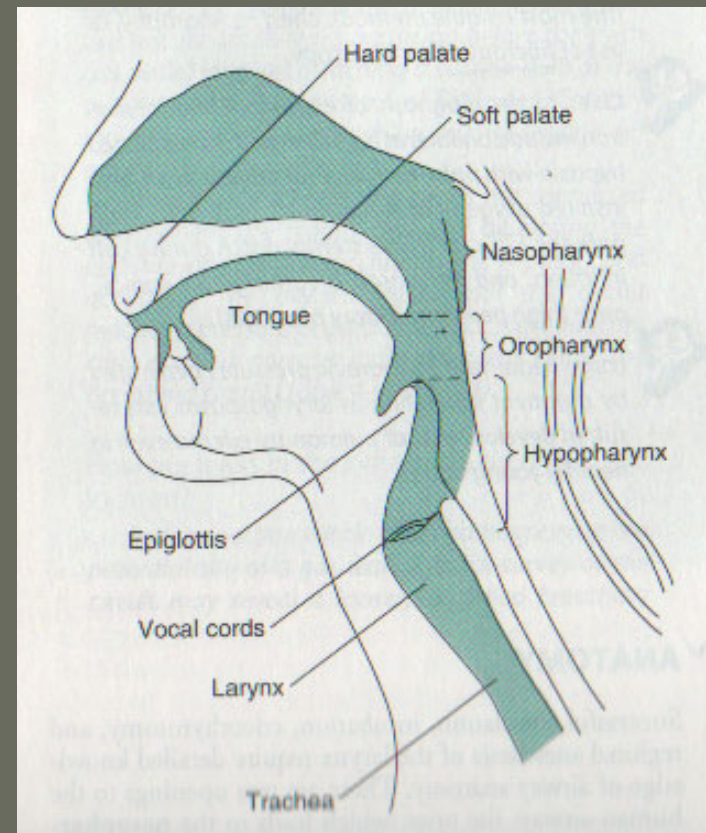




# ANATOMY

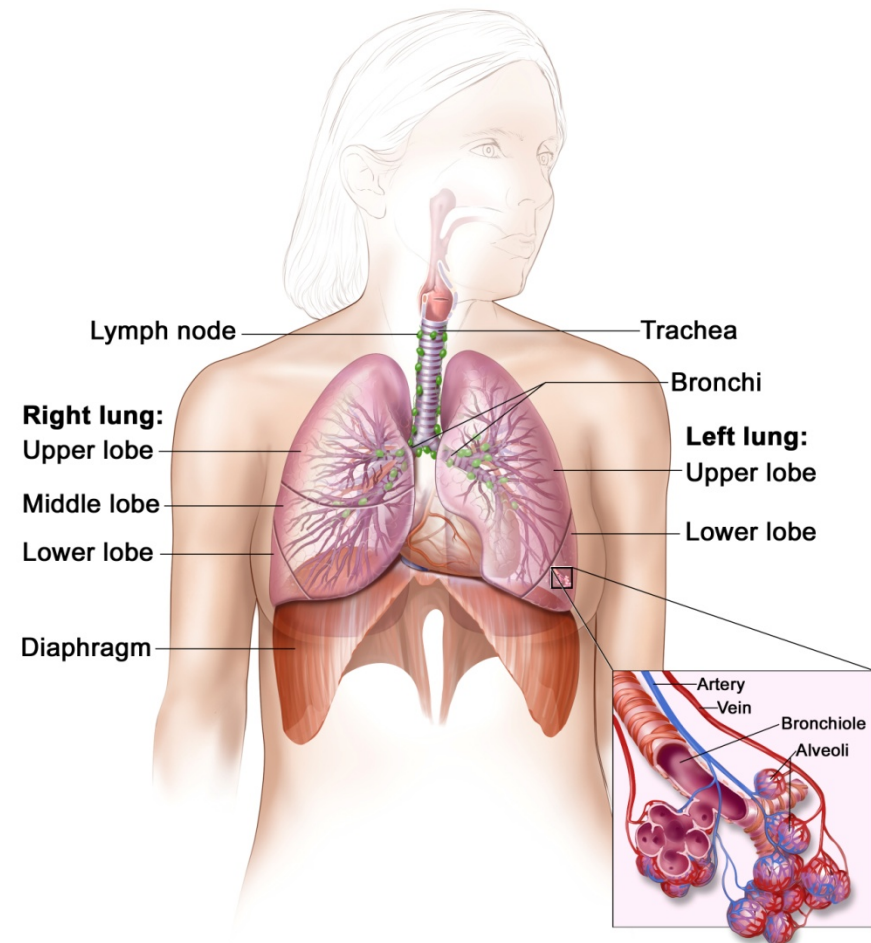
# ANATOMY

- Upper Airway
  - Consists of nasal cavity and oral cavity

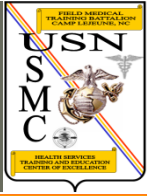


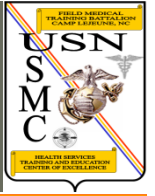
# ANATOMY

- Lower Airway
  - Trachea
  - Branches
  - Lungs



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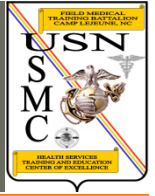




# SIGNS & SYMPTOMS

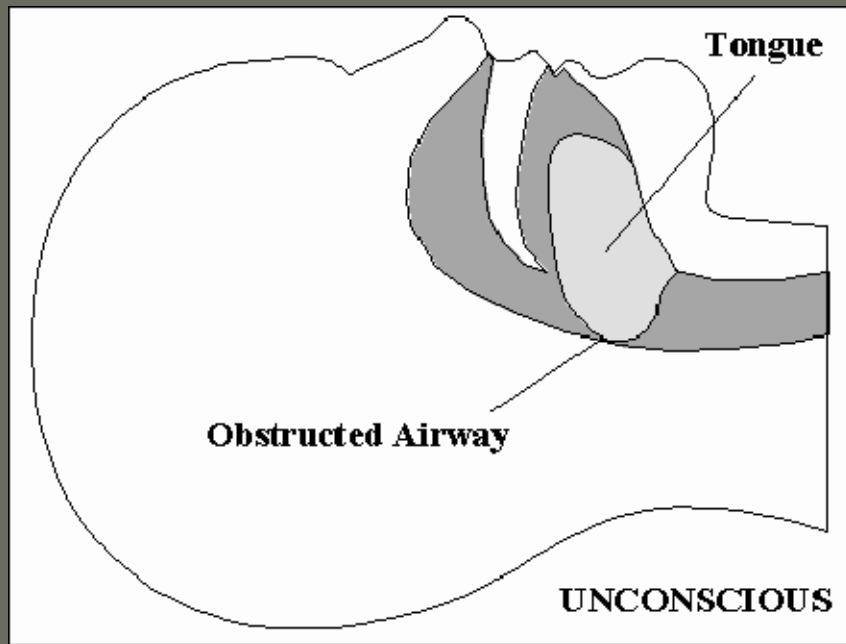


# SIGNS & SYMPTOMS



- Decreased Neurological Function
- Mechanical Obstruction

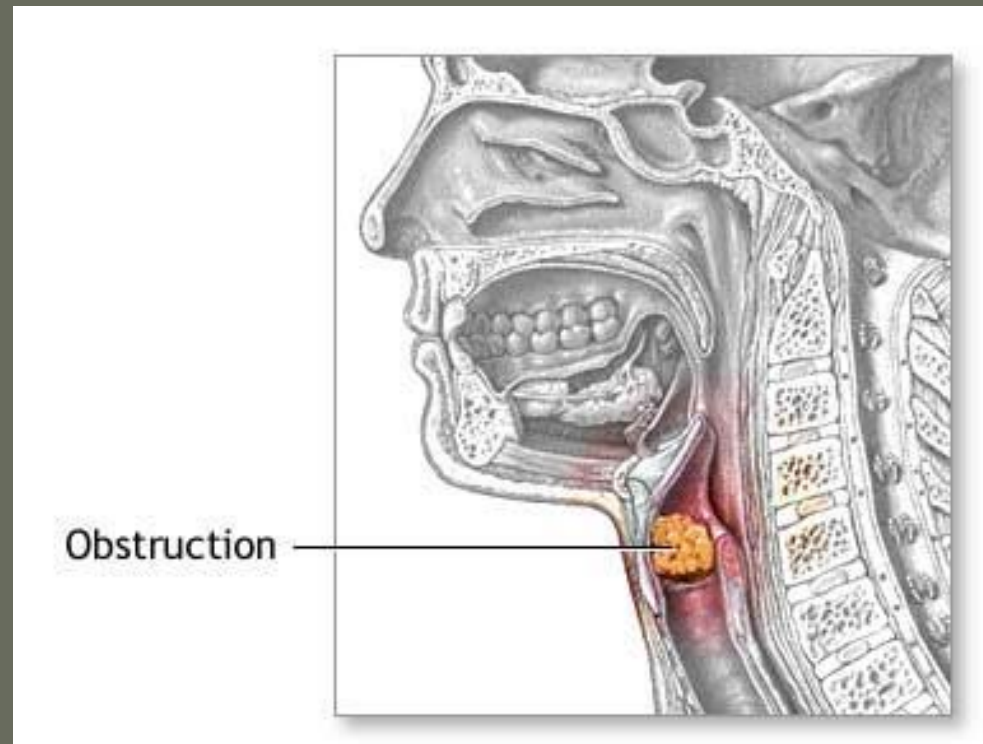
# SIGNS & SYMPTOMS



- Decreased LOC
  - Affects ventilatory drive
- Flaccidity of the tongue
  - Occludes hypopharynx
  - Most common obstruction

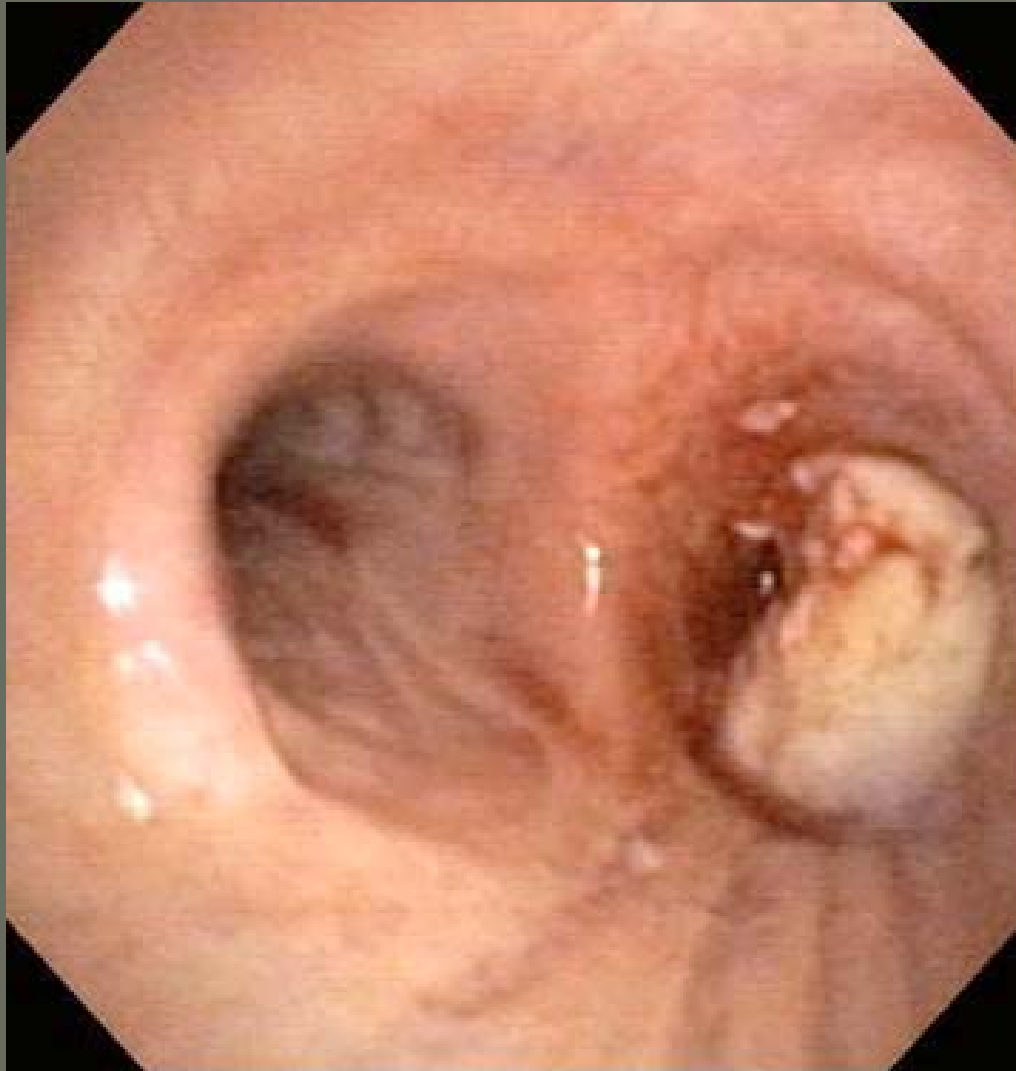
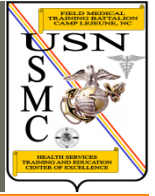
# SIGNS & SYMPTOMS

- Mechanical obstructions
  - Foreign bodies
    - Teeth
    - Gum
    - Chewing tobacco
    - Blood
    - Vomit
  - Outside materials





# SIGNS & SYMPTOMS

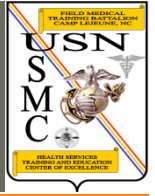


# SIGNS & SYMPTOMS





# SIGNS & SYMPTOMS



- Assessment of the Airway
  - Look for obvious injuries; talk to casualty
    - Talking suggests open airway
  - Be aware of LOC when PT is in supine
  - PT may need to remain in position found to avoid aspiration



# SIGNS & SYMPTOMS



## Conduct a physical examination:

- Look
- Listen
- Feel, Feel



# SIGNS & SYMPTOMS



## Look:

- Look at the face, lips, nose and neck of the casualty
  - Cyanosis/edema
  - Obvious injuries
  - Blood/debris
- Open and look into the mouth for foreign objects or deformities
  - Teeth
  - Tobacco/food
  - Debris
- Look for bilateral, normal chest rise and fall
  - Unilateral chest rise/fall
  - Paradoxical movement
- Look for use of accessory muscles and increased work of breathing



# SIGNS & SYMPTOMS

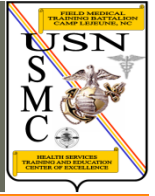


## Listen:

- Listen for presence/absence of breath sounds
  - Basic quality
  - Tachypnea/bradypnea
  - Rhythm/depth
- Listen for any sounds signaling upper airway compromise
  - Tongue
  - Blood/vomit
  - Foreign bodies



# SIGNS & SYMPTOMS

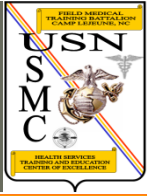


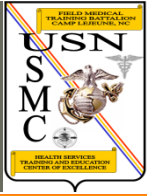
## Feel, Feel:

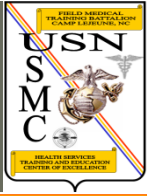
- Place hand on casualty's chest and lower ear to mouth
- Feel for warm breath against your face/ear
- Feel for chest rise and fall with hand



# SIGNS & SYMPTOMS



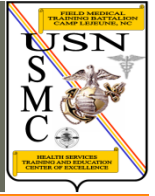




# TREATMENTS



# TREATMENTS



## Manual Clearing of Airway

- Visual inspection
- Finger sweep (if visible)
- Position patient on side to allow gravity assisted clearing of airway

# TREATMENTS

## Manual Maneuvers

- The tongue is connected to the mandible moves forward with it
- 2 Methods:
  - Trauma Jaw Thrust
  - Trauma Chin Lift





# TREATMENTS



## Nasopharyngeal Airway (NPA)

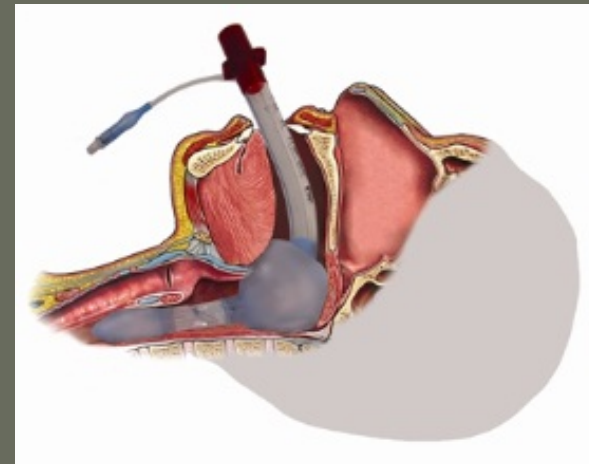
- Soft, rubberlike device inserted through one of the nares
- Used on conscious/unconscious casualties unable to maintain their own airway
- Must be long enough to bypass tongue in order to be effective

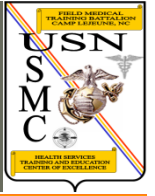


# TREATMENTS

## King Laryngeal Tracheal Tube (King LT)

- Single lumen, blindly inserted airway created as an alternate to tracheal intubation or mask ventilation, resulting in minimal airway trauma
- Used only on unconscious patients, as the gag reflex may cause vomiting







# MAINTAIN AIRWAY

