

Thorax and Lungs

Landmarks

- Anterior
 - Ribs
 - Intercostal space – below corresponding rib
 - Mubriosternal angle
 - Costal margin
- Posterior
 - Prominens and Processes
 - Scapula
 - 12th rib

Lines of Reference

- Anterior
 - Anterior axillary
 - Midclavicular
 - Midsternal
- Posterior
 - Scapular
 - Vertebral
- Lateral
 - Anterior, Mid, and Posterior Axillary lines

Lungs

- Asymmetrical lobes
- Pleurae
- Trachea
- Bronchial tree

Breathing

- Purpose
 - Supply oxygen
 - Remove carbon dioxide
 - Maintain acid-base balance
 - Heat exchange
- Control
 - Hypercapnia
 - Hypoxemia
 - pH

Breathing

- Respiration – chest cavity changes shape
- Inspiration
 - Superior-Inferior
 - Diaphragm
 - Sternocleidomastoid
 - Scalenus
 - Posterior-Anterior
 - External intercostals
- Expiration – passive plus
 - Abdominals
 - Internal intercostals

History

- Cough
- Shortness of Breath
- Chest Pain with breathing
- Past history of Resp Illnesses
- Smoking history (packs per day, pack years)
- Environmental exposure
- Self-care

Developmental Considerations

- Infant and children
 - Allergy
 - Colds
 - Wheezing, asthma
 - Childproofing home
 - Smokers
- Aging adult
 - Dyspnea on exertion
 - Activity level, particularly changes
 - Chronic Diseases

Physical Examination

- Inspection
 - Resp rate
 - Thoracic cage
 - Shape and AP diameter
 - Neck muscles
 - Posture/position – tripodding
 - Movement – ease, accessory muscles, retractions,
 - Skin and nails
 - Level of Consciousness

Physical Examination

- Palpation of Posterior Chest
 - Symmetric expansion
 - Tactile fremitus
 - Palpate chest wall
- Percuss posterior chest
 - Lung fields
 - Diaphragmatic excursion
- Auscultate posterior chest

Physical examination

- Inspect Anterior Chest
- Palpate Anterior Chest
 - Expansion
 - Tactile
 - Tenderness
- Percuss anterior chest
- Auscultate anterior chest

Breath Sounds

- Normal
 - Tracheal
 - Bronchial
 - Bronchovesicular
 - Vesicular
- Adventitious
 - Crackles
 - Wheeze
 - Rhonchus
 - Rub
- Voice sounds
 - Egophony
 - Whispered pectoriloquy
 - Bronchophony

Book References

- Chest configurations: pg 374 – 376
- Respiration patterns, pg 374 – 376
- Normal breath sounds: pg 382 – 383
- Adventitious Sounds, pg 385 – 388
- Common Resp Conditions, pg 388 table 13-8