Patient Care

Respiration

Medical Radiologic Technology Program

Respiration

- Exchanges oxygen and carbon dioxide between the external environment and the blood circulating in the body

- Full respiration = 1 inspiration + 1 expiration

Respiration Rate

- Adult average
  - 12–20 breaths/min
- Infant
  - 30–60 breaths/min
- Should be quiet, effortless and uniform
- Observe: rate, depth, quality and pattern

Observing Respiration

- Rate – *how many breaths per minute?*
- Depth – *shallow or deep?*
- Quality – *supplying the O_2 needs of the patient?*
- Pattern – *rapid or staggered (air hungry)*

Respiration Issues

Respirations of fewer than 10 breaths/min for an adult may result in:

- Cyanosis
- Apprehension
- Restlessness
- Change in level of consciousness (LOC)

- Why are these issue important to a x-ray technologist? Think of examples

Respiration Issues (cont'd)

Factors that affect respiration:

- Medication
- Illness and pathologies
- Exercise
- Age
- Emotion

Consider these factors when x-raying patients. They will influence how the exam is performed. Think of examples

Definitions

- **Bradypnea** – slow breathing with fewer than 12 breaths per minute
- **Dyspnea** – difficulty in breathing, shortness of breath, using more than the normal effort to breathe, abnormal respiratory rate
- **Orthopnea** – an abnormal condition in which a person to breath deeply or comfortably, must sit or stand
- **Tachypnea** – rapid breathing in excess of 20 breaths per minute