



تقنيات اجهزة تخدير الكورس

VITAL SIGNS

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الاهلية

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Department of Anesthesia

والطبية

قسم تقنيات التخدير

Four Stage

المرحلة الرابعة

محاضرة رقم 6

الجانب النظري

Lecture No 6.

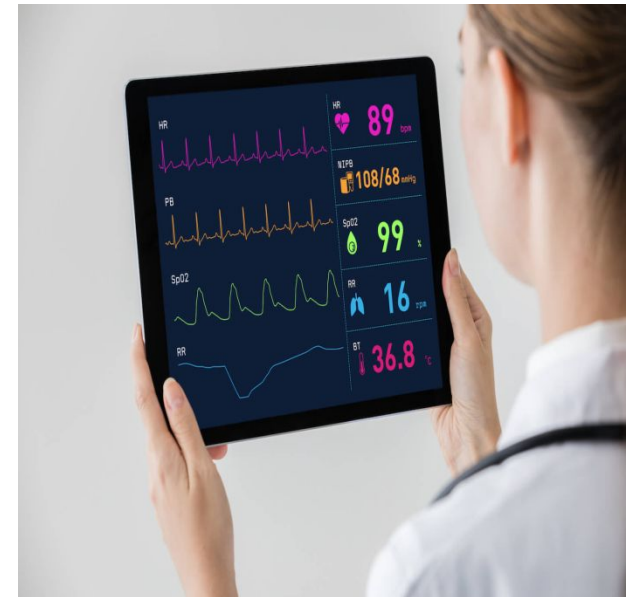
Theoretical

استاذ المادة :م.د سامي رحيم حسن

Definition

Vital signs are measurements of the body's most basic functions. The four main vital signs routinely monitored by medical professionals and health care providers include the following:

- ☐ Pulse rate
- ☐ Body temperature
- ☐ Respiration rate (rate of breathing)
- ☐ Blood pressure



Pulse rate

The pulse rate is a measurement of the heart rate, or the number of times the heart beats per minute. Taking a pulse not only measures the heart rate, but also can indicate the followi

- ☐ **Heart rhythm**
- ☐ **Strength of the pulse**

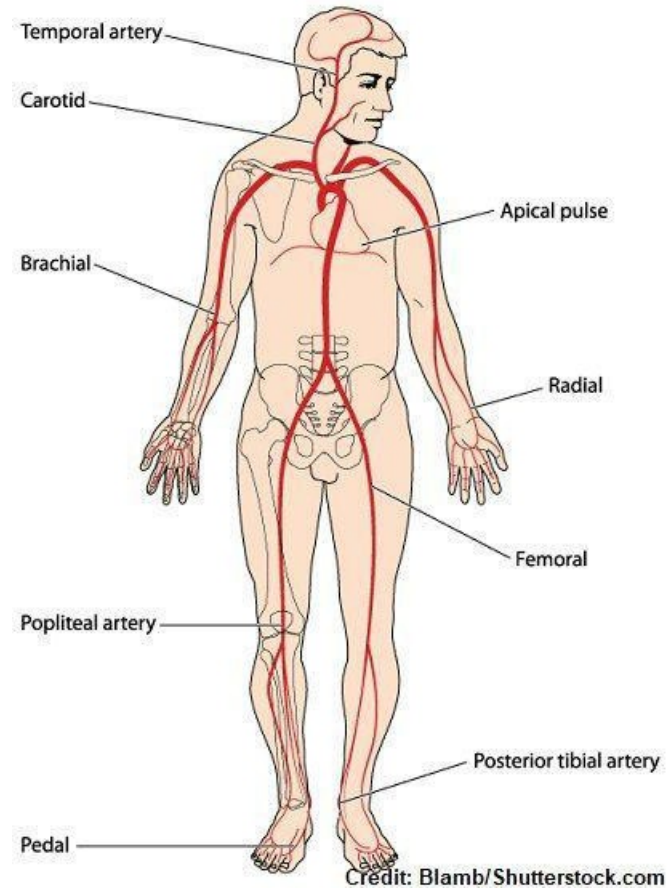
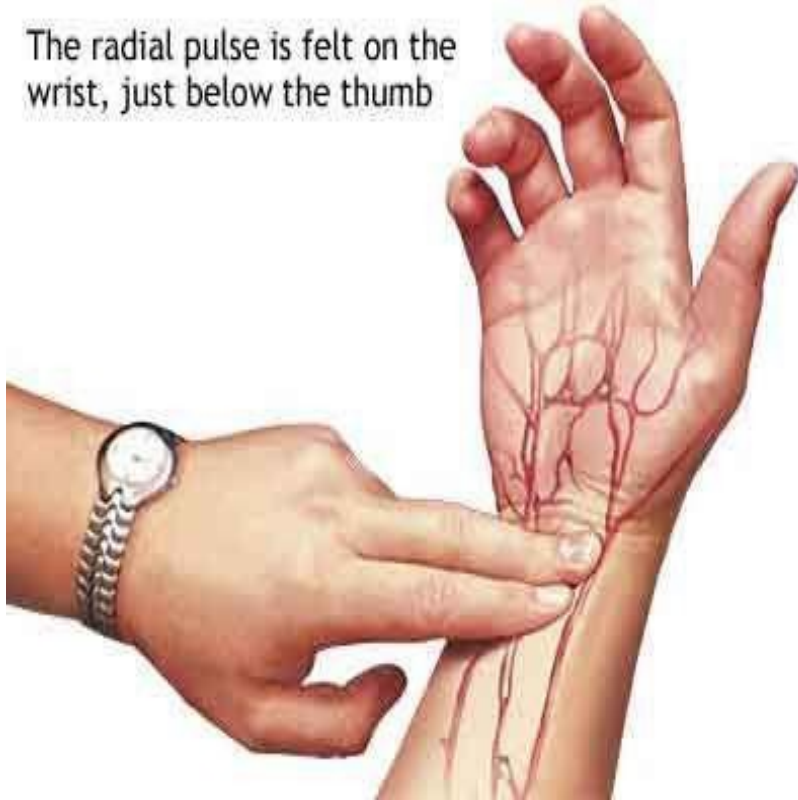


Normal pulse rate

Age	Pulse rate
< 1 year	110 - 160
1 – 2 years	100 – 150
2 – 5 years	95 – 140
5 – 12 years	80 – 120
>12 years	60 – 100

Measurement of PR

The radial pulse is felt on the wrist, just below the thumb



Know your pulse



Find your pulse



**Count your heartbeat
for 30 seconds**



Double it

It can tell you a lot about your heart

Learn more: heartfoundation.org.nz/pulse

Respiratory Rate

one of the main vital signs of the human body, is the number of breaths a person takes per minute.

The normal RR for healthy adults is 12 to 20 breaths per minute and for children varies



Normal RR according to age

Group	Age	Breaths/min
Newborn to 6 weeks	Newborn to 6 weeks	30 - 60
Infant	6 weeks to 6 months	25 - 40
Toddler	1 to 3 years	20 - 30
Young Children	3 to 6 years	20 - 25
Older Children	10 to 14 years	15 - 20
Adults	Adults	12 - 20

Causes of respiratory rate changes

Common Causes of an Increased Respiratory Rate



Fever



COPD



Asthma



Dehydration



Overdose



Acidosis



Infection



Heart conditions



Hyperventilation



Lung conditions

Common Causes of a Decreased Respiratory Rate

- Drug over dose .
- Obstructive sleep apnea
- Head injury
- Hypothermia

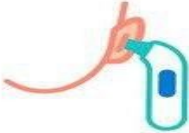
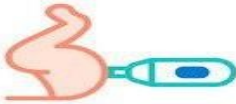


Body temperature



- Normal body temperature varies by person, age, activity, and time of day. The average normal body temperature is generally accepted as 98.6°F (37°C). Some studies have shown that the "normal" body temperature can have a wide range, from 97°F (36.1°C) to 99°F (37.2°C).
- A temperature over 100.4°F (38°C) most often means you have a fever caused by an infection or illness.
- Body temperature normally changes throughout the day.

Sites for measuring

METHOD (SITE)		NORMAL TEMPERATURE RANGE
ORAL (MOUTH)		36.4–37.2°C 97.6–99.6°F
TYMPANIC (EAR)		35.9–37.6°C 96.6–99.7°F
AXILLARY (ARMPIT)		35.2–36.9°C 95.3–98.4°F
RECTAL (RECTUM)		37.0–38.1°C 98.6–100.6°F
TEMPORAL (FORHEAD)		35.8–36.9°C 96.5–99.6°F

