

Go
the **extra**
mile *in*
health



Virtual Experience Day
International Track of Medicine

Post-discussion about the case:

A fresh nose

Literature round:

Guyton was the main source used by everyone in the group discussion

Problem: What are the baseline measurements of the human body, and the subsequent effect of alcohol on the body?

Learning goals:

1. What is a normal pulse frequency?
2. What is a normal breathing frequency?
3. What is a normal rectal temperature?
4. What are the consequences of alcohol?
 - a. What happens in the body?
 - b. What can be seen from the outside?
5. Which steps do you need to do as a caregiver?
 - a. Is there a general guideline?
 - b. Is there a guideline concerning unconscious person?
 - i. Are there differences concerning the cause of consciousness?

Answers to the learning goals:

1. What is a normal pulse frequency?

A normal pulse frequency: 60-80 times/minute at rest

It can be between 60-100 when exercising

However, this can vary depending on the person's age, weight, height, health and whether any illicit substances were consumed e.g. in this case alcohol

2. What is a normal breathing frequency?

This is usually between 14-20 times/minute

This can vary on the medical conditions that a person has, their height, weight, and or age

Also varies with exercise, where the breathing frequency increases

3. What is a normal rectal temperature?

It should around 36.5-37 degrees Celsius

It is often measured using a thermometer placed in the anus

4. What are the consequences of alcohol?

- a. What happens in the body?
- b. What can be seen from the outside?

As your sympathetic nervous system is affected by the alcohol, various consequences can be observed including:

Dilated blood vessels

Reduced responsiveness

Similar to effects of that of anaesthesia

Faster cooling of the body – however person feels warmer/hotter

Impaired balance

Dilates pupils

Dehydration: more water is excreted by the kidneys

5. Which steps do you need to do as a caregiver?
 - a. Is there a general guideline?
 - b. Is there a guideline concerning unconscious person?
 - i. Are there differences concerning the cause of consciousness?


The general guideline for steps provided as a caregiver is the following

1. When you arrive at the scene you check for the safety of the patient, as well as your own safety – a hurt caregiver cannot give any aid
2. You assess the situation of the victim using the ABCDE method of analysis

Table 1. Basics of the ABCDE approach

Letter	Life-threatening condition
A – Airway	Airway blockage, cervical spine injury
B – Breathing	Tension pneumothorax, pulmonary oedema, bronchospasm
C – Circulation	Shock (hypovolaemic, obstructive, distributive, cardiogenic)
D – Disability	Seizure, hypoglycaemia, meningitis, intracranial haemorrhage or infarction, intoxication
E – Exposure	Hypothermia or hyperthermia, critical skin conditions such as fasciitis or urticaria

3. Call 911, and continue giving first aid and care to the victim/patient
 - a. Always appoint a person to call 911 if you are not able, in order to avoid the bystander effect
4. Continue providing aid, assessing the situation as well as your study
 - a. Ask questions
 - b. Provide CPR if needed



The guidelines concerning an unconscious person are a bit different:

- You place them in the recovery position, to prevent them from choking on vomit or their blood

- Keep checking their breathing and circulation

- Make sure that the situation is safe

- If they stop breathing, lay them flat on their back

 - Provide CPR and rescue breaths in a 30:2 ratio

 - For every 30 chest compressions

 - You provide 2 rescue breaths

 - Do the chest compression in the beat of staying alive

- Once breathing again, place again in recovery position