

TNCC 8th Edition Questions and Answers (2023 Edition)

What are the greatest risks for transport?

- ✓ Loss of airway patency, displaced obstructive tubes lines or catheters, dislodge splinting devices, need to replace or reinforce dressings, deterioration in patient status change in vital signs or level of consciousness, injury to the patient and/or team members

According to Newton's law which of these two forces is greater: size or force?

- ✓ Neither. For each force there is an equal and opposite reaction.

What is the relationship between mass and velocity to kinetic energy?

- ✓ Kinetic energy is equal to $\frac{1}{2}$ the mass multiplied the square of its velocity therefore when mass is doubled so is the net energy, however, when velocity is doubled energy is quadrupled.

What is tension?

- ✓ stretching force by pulling at opposite ends

What is compression?

- ✓ Crushing by squeezing together

What is bending?

- ✓ Loading about an axis. Bending causes compression on the side the person is bending toward and tension on the opposite side

What is shearing?

- ✓ Damage by tearing or bending by exerting opposite forces on different parts in opposite directions at the same time.

What is torsion?

- ✓ Torsion forces twist ends in opposite directions.

What is combined loading?

- ✓ Any combination of tension compression torsion bending and/or shear.

What are the four types of trauma related injuries?

- ✓ Blunt, penetrating, thermal, or blast.

What are contributing factors to injuries related to blunt traumas?

- ✓ The point of impact on the patient's body, the type of surface that is hit, the tissue's ability to resist (bone versus soft tissue, air-filled versus solid organs), and the trajectory of force.

What are the seven patterns of pathway injuries related to motor vehicle accidents?

- ✓ Up and over, down and under, lateral, rotational, rear, roll over, and ejection.
- ✓ Differentiate between the three impacts of motor vehicle impact sequence.
- ✓ The first impact occurs when the vehicle collided with another object. The second impact occurs after the initial impact when the occupant continues to move in the original direction of travel until they collide with the interior of the vehicle or meet resistance. The third impact occurs when internal structures collide within the body cavity.

What are the three factors that contribute to the damage caused by penetrating trauma's?

- ✓ The point of impact, the velocity and speed of impact, and the proximity to the object.

What causes the primary effects of blast traumas?

- ✓ The direct blast effects. Types of injuries include last long, tympanic membrane rupture and middle ear damage, abdominal hemorrhage and perforation, global rupture, mild Trumatic brain injury.

What causes the secondary effects of blast traumas?

- ✓ Projectiles propelled by the explosion. Injuries include penetrating or blunt injuries or l penetration.

What causes the tertiary effects of blast traumas?

- ✓ Results from individuals being thrown by the blast wind. Injuries include hole or partial body translocation from being thrown against a hard service: blunt or penetrating trauma's, fractures, traumatic amputations.

What causes quaternary effects of blast traumas?

- ✓ All explosion related injuries, illnesses, or diseases not due to the first three mechanisms. Injuries include external and internal burns, crush injuries, closed and open brain injuries, asthmatic or breathing problems from dust smoke or toxic fumes, angina, or hyper glycemia and hypertension.

What causes quinary effects of blasts traumas?

- ✓ Those associated with exposure to hazardous materials from radioactive, biologic, or chemical components of a blast. Injuries include a variety of health effects depending on agent.

What are the three processes that transfer oxygen from the air to the lungs and blood stream

- ✓ Ventilation: the active mechanical movement of air into and out of the lungs; diffusion: the passive movement of gases from an area of higher concentration to an area of lower concentration; and perfusion: the movement of blood to and from the lungs as a delivery medium of oxygen to the entire body.