

# Injury

**Injury** (*trauma*) represents a sudden event affecting the organism from the outside and damaging it. An accident leads to *an accident* and its consequence is **an injury** (i.e. an objectively detectable health disorder resulting from an accident).

## Types of injury (vulnerations)

- **open** (*vulneratio aperta*) – broken continuity of the skin or mucous membrane, depending on the penetration into body cavities there are:
  - **non-penetrating**
  - **penetrating** – through dura mater encephali or spinalis, parietal pleura, peritoneum
- **closed** (*vulneratio occlusa*) – tissue damage in greater depth without disturbance the skin and mucous membranes

## Epidemiology

Injuries are the most common cause of death for people under 40 (in the age group under 25, polytraumas predominate), overall they are in 4th place:

1. cardiovascular disease
2. cancer
3. cerebrovascular accidents
4. injuries

## Causes of injuries

- according to the mechanism of occurrence, we divide injuries into:
  1. **traffic** – mostly multiple injuries and polytraumas, often multiple people injured at the same time, high % mortality and disability
  2. **occupational** – loss of limbs, falls from a height, crush syndrome, electric shocks, burns, etc.
  3. **agricultural** – loss of limbs, crush syndrome, recovery in inaccessible terrain is typical
  4. **domestic** – mostly falls from a small height, injuries while working with various devices
  5. **sports** – mostly limb injuries, tendon ruptures, diving – spinal cord injuries
  6. **criminal** – blunt injuries, stab and gunshot wounds, or blast syndrome

## Injury prevention

- the main factor in the occurrence of accidents is the person himself - for the prevention of traffic accidents, the most important thing is to follow the rules of road traffic and the use of safety features of vehicles, for the prevention of occupational accidents, then the observance of the principles of occupational safety (protective equipment, learning to operate devices, etc.)
- it is a task for the whole of society, education in the family, at school, various organizations (traffic inspectorates, occupational safety, etc.) and the media take part in it

## Specific accidents in transport

- **drivers and passengers:**
  - *not wearing a seatbelt* – contusion of the heart when hitting the steering wheel, deceleration with rupture of the aorta, head impact with the windshield (intracranial and maxillofacial injury)
  - *"seat belt injury"* – contusion of the myocardium (right seat), blunt injury to the liver (left seat)
  - *"whiplash injury"* – hyperextension of the cervical spine with subsequent hyperflexion in the event of an impact from behind (distortion of the cervical spine)
  - *"paper bag syndrome"* – internal pneumothorax with a small impact on the chest, if the breath is held (closed glottis) during inspiration
  - *dashboard trauma* – floor fractures of the lower limbs (tibia plateau fractures, patella fracture, knee joint dislocation, femoral neck and diaphysis fractures, posterior hip joint dislocation)
- **pedestrians:**
  - *carriage trauma* – earlier, created at low speed - rolling mechanism with decollement
  - *fender trauma* – lower speeds – impact with the pedestrian thrown and severe lower leg fractures
  - *hood trauma* – higher speeds – falling on the hood and throwing the body a long distance with polytrauma

# Links

## Related articles

- Assistance with dressing
- Bone fractures

## References

- PASTOR, Jan. *Langenbeck's medical web page* [online]. [cit. 2010]. <<https://langenbeck.webs.com/>>.