

# First Aid

A set of measures that purposefully aim to protect and save the health of persons affected by a sudden health disorder.

1. **Technical first aid** – removal of the influence of external factors that caused the injury, calling the emergency services.
2. **Medical first aid:**
  1. **pre-medical** – self-help, mutual help, basic first aid, advanced first aid;
  2. **medical** – arrest of major bleeding, airway and venous access, CPR, anti-shock measures, PNO treatment, aseptic wound dressing, immobilization, positioning and transport.

## Priorities in the Provision of Medical First Aid

- **A (airway), B (breathing), C (circulation), D (defibrillation);**
- stop external bleeding - preferably compression and elevation, not strangulation;
- puncture of tension PNO;
- cardiac tamponade puncture;
- immobilization – limbs (preferably a vacuum splint, there is a risk of compartment syndrome with a pneumatic splint), neck collar;
- analgetics – opiates can be administered (but with ensured ventilation!) bleeding is better demonstrated by ultrasound or clinical examination.
- diagnosis of unconsciousness - common causes of unconsciousness include hypoxia, hypercapnia, hypoperfusion of the brain, application of sedatives or analgetics

## Mass Disaster

- i.e. those whose nature requires the deployment of extraordinary means (multiple emergency response groups, assistance from firefighters, the police of the country in question, the army, TAAS...), possible injuries > 3 people, of which at least one is severe or > 10 that are minor;
- a disaster is a mass misfortune caused by natural influence;
- the task of the first departure group is to estimate the extent of the disaster (mobilization of resources), the first situational report (description of the situation, number of injured, "MU position", problems and risks, reinforcements) must be immediately forwarded to the operations center (ambulance, dispatch ([https://cs.wikipedia.org/wiki/Zdravotnick%C3%A9\\_oper%C4%8Dn%C3%AD\\_st%C5%99edisko](https://cs.wikipedia.org/wiki/Zdravotnick%C3%A9_oper%C4%8Dn%C3%AD_st%C5%99edisko))).
- at the scene of the accident, a **dressing station** (for the wounded requiring immediate assistance) with medical equipment, an **evacuation station** and an **evacuation route** (providing a PCR) are established;
- the priority is the examination and sorting of all (**triage** - HN tags - special tags for mass disasters) takes precedence over the treatment of individual wounded (only life-saving actions - opening the airways, stabilized position, stopping arterial bleeding);

**START** ("Snadné Třídění A Rychlý Transport" - **E**asy **T**riage **A**nd **R**apid **T**ransport) – assessment of vital functions (breathing, blood circulation, consciousness):

1. emergency assistance,
  2. delayable assistance (spontaneous breathing and circulation, responsive to challenge),
  3. slightly injured (walking),
  4. dead.
- After initial treatment and further (medical) sorting, he is transported to suitable (not the nearest) medical facilities
  - only secured wounded can be transported, according to the priority of transfer, by a suitable means.

## Transporting the Wounded

- It is only possible after ensuring vital functions, immobilizing the limbs and replacing the lost blood volume;
  - it must be carefully considered where to direct the transport - preferably to a more distant but equipped workplace (trauma center) to avoid secondary transfer.
  - The injured person must always be accompanied by a person who must monitor the development of his health condition:
1. the injured person is transported alone with the support of another person;
  2. carrying the injured by one or more persons;
  3. carrying the injured using a stretcher or other improvised means;
  4. transport of the injured by means of transport.

## Transport Positions

1. Lying on the back horizontally - conscious injured, suspected spinal injury;
2. lying on the back with the head lowered (anti-shock, Trendelenburg position) - in case of shock;
3. lying on the back with head elevated - in case of head injuries (brain edema);
4. semi-sitting position (Fowler's position) - for shortness of breath, chest, neck, face injuries;
5. lying on the stomach horizontally - orofacial injuries with bleeding, fractures of the thoracic and lumbar spine;
6. stabilized position - unconscious injury;
7. minor injuries to the upper half of the body can be transported while sitting, standing or walking.

## "EMA"

- Emergency medical assistance;
  - a set of methods, measures and resources that form a system ensuring professional first aid in sudden life-threatening situations (at the scene of an accident, during transport).
  - Two types of provision:
1. scoop and run (load and run) - USA, England - a middle health worker arrives on the scene, calls the doctor only in case of urgent need;
  2. stay and play - Europe - the doctor provides important treatment already at the scene of the accident.

## References

### Related articles

- First aid for spinal injuries

### External links

- Traffic accident - interactive algorithm + test (<https://www.akutne.cz/algorithm/cs/76--/>)
- Triage and traumaplan - interactive algorithm + test (<https://www.akutne.cz/algorithm/cs/280--/>)

## Source

- Pastor, J.: Langenbeck's medical web page (<http://www.freewebs.com/langenbeck/>)

**CONTAMINATED**

**Personal Property Receipt**  
Evidence Tag \*413730\*

Destination \*413730\*

Via \*413730\*

**TRIAGE TAG**

☐ S ☐ L ☐ U ☐ D ☐ G ☐ E  
Salivation Lacrimation Urination Defecation G.I. Distress Emesis

**AUTO INJECTOR** 1 2 3 4 5

Yes No Gross Decon  
Yes No Secondary Decon

Solution

Blunt Trauma  
Burn  
C-Spine  
Cardiac  
Crushing  
Fracture  
Laceration  
Penetrating Injury

Age

☐ Male ☐ Female

Other: **VITAL SIGNS**

Time	B/P	Pulse	Respiration

Time	Drug Solution	Dose

**EVIDENCE**

**MORGUE**  
Pulseless/Non-Breathing \*413730\*

**IMMEDIATE**  
Life Threatening Injury \*413730\*

**DELAYED**  
Serious, Non Life Threatening \*413730\*

**MINOR**  
Walking Wounded \*413730\*