Документ подписан простой электронной подписью
Информация о владельце:
ФИО: Косенок Сергей Михайлович
Должность: ректор
Дата подписания: 18.07.2025 07:16:41
Уникальный программный ключ:
e3a68f3eaa1e62674b54f4998099d3d6bfdcf836

ASSESSMENT TOOLS
DISASTER MEDICINE

Curriculum	31.05.01 General Medicine
Specialty	General Medicine
Form of education	Full-time
Designer Department	Surgical diseases
Graduate Department	Internal diseases

Sample tasks and tests

1. Formative assessment

Sample tests (with keys) for formative assessment.

1) Where should the victim with a hip gunshot wound, without damaging the great vessels, be sent during the decompensated reversible phase of shock when providing qualified assistance?
a) To the operating room for primary surgical treatment of the wound with concurrent anti-shock therapy;
b) To a dressing room for primary surgical treatment of the wound with concurrent anti-shock therapy;
c) To anti-shock care first, then to dressing for primary surgical treatment;
d) To the hospital for anti-shock therapy and subsequent evacuation.

2) What type of immunization against tetanus is given to an adult vaccinated person who has sustained a superficial incision of the forearm?
a) Only active immunization;
b) Only passive immunization;
c) No immunization is necessary;
d) Both active and passive immunization.

3) What type of immunization against tetanus is given to an adult vaccinated person who has sustained an extensive, contaminated hip gunshot wound with soil?
a) Only active immunization;
b) Only passive immunization;
c) No immunization is necessary;
d) Both active and passive immunization.

4) Specify measures for preventing anaerobic infection during stages of medical evacuation:
a) Transport immobilization;
b) Primary surgical treatment of the wound;
c) Avoidance of primary suturing;
d) Adequate anesthesia.

5) What is the microbic number?
a) The number of microbial colonies grown on a medium from wound exudates;
b) The number of microbial strains cultured from a wound;
c) The number of microorganisms per 1 mm^3 of tissue;
d) The number of microorganisms observed in wound exudates under a microscope at 200x magnification.
6) What is the role of antibiotics in the treatment of wounds?

a) To sterilize the wound;
b) To promote the formation of granulations;
c) To delay the development of wound infection;
d) To reduce wound exudation.

7) Early clinical signs of tetanus:
a) Significant hypostasis without signs of hyperemia around the wound;
b) Lockjaw of the masticatory muscles;
c) Difficulties swallowing;
d) Tonic and clonic spasms;
e) Rigidity of occipital "muscles."

8) When should topical antiseptic agents be used?
a) During primary surgical treatment of a wound;
b) During secondary surgical treatment of a wound;
c) During the stage of acute purulent inflammation;
d) During the regeneration stage;
e) During the epithelization stage.

9) Which of the following signs are characteristic of gas gangrene?
a) Hyperemia around the wound;
b) Absence of local hyperthermia;
c) Pronounced intoxication;
d) Air accumulates in hypodermic tissue and does not accumulate in muscles.

10) In a closed thorax injury (such as rib fractures) complicated by pneumothorax, the following symptoms can be observed:
a) Asthma;
b) Hemothorax (pneumorrhagia);
c) Subcutaneous emphysema;
d) Dullness on percussion.

11) Hypodermic emphysema in the case of closed fractures of the ribs is a sign of:
a) Hemothorax;
b) Pneumothorax;
c) Lung contusion;
d) Lung injury.

12) In a closed thoracic injury (such as rib fractures) complicated by hemothorax, the following symptoms may be observed:
a) Bradycardia;
b) Diminished breath sounds;
c) Subcutaneous emphysema;
d) Dullness on percussion on the affected side.

13) The first medical assistance for a penetrating wound of the thorax includes:
a) Vagosympathetic blockade;
b) Infusional therapy;
c) Puncture of the pleural cavity;
d) Thoracotomy if indicated.

14) The indication for thoracotomy during qualified medical care is:

a) Heart injury;
b) Open pneumothorax;
c) Ongoing intrapleural bleeding;
d) Closed pneumothorax.

15) An occlusive bandage should be used in cases of:
a) Closed pneumothorax;
b) Open pneumothorax;
c) External valve pneumothorax;
d) Internal valve pneumothorax.

16) Extensive subcutaneous emphysema is characteristic of:
a) Closed pneumothorax;
b) Open pneumothorax;
c) Valve pneumothorax;
d) Large hemothorax.

17) The optimal site for pleural cavity puncture in case of pneumothorax is:
a) 7th intercostal space at the posterior axillary line;
b) 2nd intercostal space at the midclavicular line;
c) 10th intercostal space at the scapular line;
d) The area where subcutaneous emphysema is most pronounced;
e) 2nd intercostal space at the scapular line.

19) First aid for a victim with a penetrating abdominal wound and evisceration of internal organs should include:
a) Injection of a narcotic analgesic;
b) Replacing eviscerated organs into the abdominal cavity;
c) Applying a protective bandage;
d) Moistening a bandage with water.

20) Primary surgical treatment of an anterior abdominal wall wound without clinical signs of internal injury should be performed:
a) In the first-aid room;
b) In the operating room;
c) Only wound cleaning if no internal damage is suspected.

21) The reliable signs of a penetrating abdominal injury are:
a) protrusion of the omentum from the wound;
b) positive Schott's (Shchetkin-Blumberg) sign;
c) leakage of intestinal contents from the wound;
d) localization of the wound in the anterior abdominal wall.

22) In the case of a penetrating stomach wound, the first to be operated are those:
a) with symptoms of bleeding into the abdominal cavity;
b) with peritonitis;
c) in satisfactory condition;
d) with a clinical picture of traumatic shock.

23) Tension of the anterior abdominal wall is a symptom of:
a) tear of the gut;
b) pelvic bone fractures;

c) fractures of vertebrae in the lumbar region;
d) surface wounds of the abdominal wall.

24) When providing qualified medical care, the victim with an intracranial hematoma should be sent:
a) to the hospital for dehydrating therapy;
b) to the first-aid room;
c) to the operating room;
d) to the antishock room for pre-operative preparation;
e) to the evacuation office for specialized surgical help.

25) Brain concussion is characterized by:
a) deviation of language;
b) amnesia;
c) anisocoria;
d) vomiting.

26) An intracranial hematoma is characterized by:
a) loss of consciousness;
b) tachycardia;
c) anisoreflexia;
d) sharp fall in arterial blood pressure.

27) The sign of a left-sided intracranial hematoma is:
a) expansion of the pupil on the right;
b) expansion of the pupil on the left;
c) hemiparesis on the right;
d) hemiparesis on the left.

28) The reliable symptom of a skull base fracture is:
a) anisocoria;
b) raccoon/panda sign;
c) nausea and vomiting;
d) nasal or ear liquorrhea.

29) The sign indicating the need for emergency surgery in head injury is:
a) ongoing bleeding;
b) brain hypostasis;
c) progressing brain compression;
d) clinical signs of brain contusion.

30) In the case of burns on the front surface of the chest and abdomen, and circular burns on the entire left lower limb, the total burn area will be:
a) 45%;
b) 27%;
c) 36%;
d) 42%;
e) 30%.

31) In the case of a IIIA-degree burn, the affected tissues are:
a) only the epidermis;
b) skin down to the Malpighian layer;
c) skin at all depths;

d) dermis and subcutaneous tissue;
e) dermis, subcutaneous tissue, and muscles.

32) When providing first aid to a patient in burn shock, it is necessary to:
a) administer narcotic analgesics;
b) perform bilateral paranephric blockade;
c) transfuse blood substitutes;
d) perform primary cleaning of the burn wound.

33) The sign of recovery from burn shock is:
a) normalization of diuresis;
b) hyperthermia;
c) increase in systolic blood pressure to 80 mm Hg or more;
d) polyuria.

34) Clinical signs of deep burns include:
a) puffiness and hyperemia of the skin;
b) presence of a scab on the burn surface;
c) small, non-intense bubbles with yellowish liquid;
d) bubbles with hemorrhagic contents on the burn surface.

35) Define the predictive index (PI) and the prognosis for a 48-year-old patient with drain burns on both upper extremities, the head, the neck, and the upper airways:
a) PI = 47 — favorable prognosis;
b) PI = 75 — rather favorable prognosis;
c) PI = 85 — doubtful prognosis;
d) PI = 103 — adverse prognosis.

36) After a thermal burn, a patient has a continuous circular scab on the right upper extremity; the entire surface of the left upper extremity and right lower extremity are characterized by hyperemia and multiple bubbles with clear contents. Define the Frank's index (FI) and the prognosis:
a) FI = 27 — favorable prognosis;
b) FI = 54 — rather favorable prognosis;
c) FI = 72 — doubtful prognosis;
d) FI = 99 — adverse prognosis.

37) Which degree of frostbite characterizes "trench foot"?
a) First degree
b) Second degree
c) Third degree
d) Fourth degree

38) The progression of frostbite injury can be divided into the following stages:
a) primary reaction period;
b) latent period;
c) heat period;
d) rewarming period.

39) Which degree of frostbite is characterized by partial tissue damage with the presence of blistering and preserved sensation?

a) First degree

b) Second degree
c) Third degree
d) Fourth degree

40) Correct actions in case of frostbite injury are:
a) rub the frozen part with snow;
b) dip the frozen part into cool (25–30°C) water, then gradually increase the temperature;
c) immediately dip the frozen part into hot water (40°C), then reduce the water temperature to normal body temperature;
d) treat the skin with alcohol;
e) apply a warmed bandage (with cotton wool).

41) In frostbite of an extremity, it is necessary:
a) to inject 0.25% novocaine solution intravenously;
b) to inject 0.25% novocaine solution periarterially;
c) to perform a procaine circular block;
d) to make infiltration with 0.25% novocaine solution.

42) The main factor in the intermediate stage of compression syndrome is:
a) acute kidney failure;
b) intoxication;
c) azotemia;
d) purulent necrotic changes of soft tissues.

43) Moderate compression syndrome can occur with compression of:
a) shins and hips for 6 hours;
b) shins and hips for 4 hours;
c) forearms for 4 hours;
d) shins for 4 hours;
e) both hips for 9 hours.

44) After releasing an extremity from a tourniquet, a rubber bandage is used when:
a) passive movements are present in the joints;
b) active and passive movements are present;
c) there is a distinct pulsation in distal segments;
d) there are strong indications of tissue vitality.

45) In first aid for compression syndrome, the following should be performed:
a) subfascial injection of novocaine in the compression zone;
b) procaine block in the proximal zone of compression;
c) intraosseous anesthesia;
d) paranephric block.

46) In the absence of fractures and wounds, the treatment for compression syndrome should include:
a) elastic bandage of the limb;
b) bandage in the proximal zone of compression;
c) warming the affected limb;
d) procaine block;
e) transportation splint.

47) Operations for compression syndrome include:
a) necrectomy;

b) fasciotomy;
c) amputation of the limb;
d) primary surgical treatment of wounds with wounds;
e) skin plastic surgery for soft tissue injuries.

48) Which damages can occur together?
a) Closed fracture of the right hip, open fracture of the left hip and shin;
b) Second-degree burn of the forearm, fracture of the beam bone in the typical location;
c) Fracture of the IV–VI ribs on the right, brain concussion;
d) Pelvic bone fracture with bladder injury.

49) The severity of combined radiation injury in a patient with a closed fracture of the humerus at a dose of 2.5 Gy is:
a) I degree (mild);
b) II degree (moderate);
c) III degree (severe);
d) IV degree (extremely severe).

50) The main damages associated with pelvic fractures include:
a) pubic bone fracture, fracture of the middle third of the femur;
b) pelvic bone fracture (Malgen type), rupture of the spleen;
c) dislocation of the hip, fracture of the neck of the humerus;
d) pelvic bone fracture (Malgen type), burn of the hand (III–IV degree);
e) symphysis rupture, intracranial hematoma.

51) The first aid for combined radiation injuries includes:
a) preventive blood transfusion;
b) partial sanitary processing;
c) full sanitary processing;
d) primary wound surgery;
e) administration of antidotes, antibiotics, and tetanus serum.

52) At which stage of radiation sickness can surgery be performed (if indicated)?
a) latent stage;
b) early stage;
c) initial stage;
d) surgery is inadmissible.

53) Is it permissible to apply primary sutures to a gunshot wound of the hip in a combined radiation injury of moderate severity?
a) Only if there is no fracture;
b) Only if the wound is penetrating;
c) In all cases;
d) Never permissible.

54) The medical care involving initial removal of a protective shoulder bandage from a patient with soft tissue injury of the shoulder (without bleeding symptoms) and damage from organophosphates is classified as:
a) pre-medical help;
b) first medical assistance;
c) qualified help;
d) specialized help.

55) Where should a victim with complicated lumbar spine trauma and radiation dose of 4 Gy be sent for qualified care?
a) to the antishock room;
b) to the operating room;
c) to the specialized treatment unit;
d) to the hospital.

56) The phase of medical treatment that includes primary surgical wound care is:
a) the initial (rescue) phase;
b) the recovery phase;
c) the rehabilitation phase.

57) The level of training corresponding to qualified medical care is:
a) paramedic;
b) general practitioner doctor;
c) general surgeon;
d) specialist (traumatologist, thoracic surgeon, angiosurgeon, etc.);
e) anesthesiologist.

58) The type of medical care that includes abdominal surgeries is:
a) first medical aid;
b) qualified;
c) specialized.

59) Actions that can be postponed during first aid due to large victim flow include:
a) bladder catheterization in case of urine retention;
b) administration of antibiotics;
c) injection of tetanus antitoxin;
d) checking previously applied bandages;
e) pleural puncture in case of tension pneumothorax.

60) During qualified medical care in a high victim flow (over 400 per day), which actions can be delayed?
a) amputation of an extremity with irreversible ischemia;
b) craniotomy for intracranial hematoma;
c) primary soft tissue wound treatment;
d) jaw fracture splinting;
e) cystostomy for urethral injury.

61) During a medium victim flow (200–400 per day), which actions can be delayed?
a) amputation for irreversible ischemia;
b) craniotomy for intracranial hematoma;
c) soft tissue wound treatment;
d) jaw fracture splinting;
e) cystostomy for urethral injury.

62) Victims with penetrating abdominal wounds without signs of decompensated shock should be directed:
a) to the bandaging room;
b) to the operating room;
c) to the trauma platform;

d) to the evacuation room;
e) to the antishock room.

63) The main pathogenetic factor common to shock from multiple skeletal trauma, large vessel injury with hemorrhage, and toxic damage is:
a) pain syndrome;
b) hypovolemic shock;
c) respiratory failure.

64) Which clinical sign can be used to assess hemodynamics?
a) skin temperature of extremities;
b) central venous pressure;
c) hourly urine output;
d) rectal and skin temperature gradient;
e) arterial blood pressure.

65) The phases of shock development are:
a) reversible decompensated;
b) subcompensated;
c) irreversible decompensated;
d) reversible compensated.

66) The shock index is:
a) pulse rate divided by central venous pressure;
b) systolic blood pressure divided by pulse rate;
c) systolic blood pressure divided by diastolic pressure;
d) pulse rate divided by systolic blood pressure;
e) systolic blood pressure divided by central venous pressure.

67) The cause of adult respiratory distress syndrome is:
a) severe pneumothorax;
b) asphyxia;
c) interstitial pulmonary edema;
d) lung wound.

68) The main sign of uremic, traumatic, or hypothermal coma development is:
a) mechanical injury or compression of brain tissue;
b) impact of endotoxins on the brain;
c) brain hypoxia;
d) prolonged stage of excitement.

69) Intravenous infusions as part of anti-shock therapy are administered during:
a) first aid;
b) pre-medical aid;
c) first medical assistance;
d) qualified care;
e) specialized care.

70) During first aid for victims with decompensated reversible shock, it is necessary to:
a) remove the victim from shock and evacuate;
b) transfer the victim to the compensated shock stage and evacuate;

c) immediately evacuate with anti-shock measures en route;
d) perform symptomatic therapy.

71) Qualified care for victims with reversible decompensated shock and small intestine injury without intra-abdominal bleeding involves:
a) emergency operation;
b) antishock room treatment;
c) hospitalization for infusion therapy and preparation for surgery.

72) Which of the following should be used in anti-shock therapy during first aid?
a) infusion therapy;
b) immobilization;
c) stop intra-abdominal bleeding;
d) novocaine blockade.

73) The prognosis of resuscitation is better when:
a) blood circulation stops first;
b) respiration stops first;
c) central nervous system damage occurs first.

74) Full recovery of CNS functions after clinical death is possible if the duration is:
a) 3–4 minutes in hyperthermia;
b) 3–4 minutes in normothermia;
c) 5–6 minutes in normothermia;
d) 10–15 minutes in hypothermia.

75) Extending the head at the cervical spine ensures airway patency in:
a) 100% of cases;
b) 80% of cases;
c) 100% with simultaneous protrusion of the lower jaw.

76) Advantages of mouth-to-mouth artificial ventilation include:
a) applicability in any conditions;
b) neuroreflex stimulation of the respiratory center;
c) neuroreflex stimulation of the cardiovascular center;
d) capacity 2–3 times higher than normal.

77) In case of ineffective lung ventilation, it is necessary to:
a) tilt the head back, protrude the lower jaw forward, and continue ventilation;
b) lower the head end;
c) raise the head end;
d) call for additional help.

78) Possible complications of mouth-to-mouth ventilation include:
a) dislocation of the jaw;
b) ventricular fibrillation;
c) regurgitation;
d) lung alveoli rupture, pneumothorax.

79) Main symptoms of cardiac arrest include:
a) spasms;
b) absence of pulse on carotid;

c) absence of spontaneous breathing;
d) narrow pupils;
e) wide pupils;
f) loss of consciousness.

80) During pneumocardial resuscitation, the patient should be placed:
a) horizontally on the back;
b) on the back with head elevated;
c) on the back with head lowered.

81) During external cardiac massage, palms should be placed:
a) on the upper third of the sternum;
b) on the border of the upper and middle thirds of the sternum;
c) on the border of the middle and lower thirds;
d) in the fifth intercostal space on the left.

82) External cardiac massage:
a) provides normal alveolar ventilation;
b) should be performed on a firm surface;
c) produces 20–40% of normal cardiac output;
d) can cause rib fractures, indicating effectiveness.

83) An indicator of effective cardiac massage is:
a) pupils constrict;
b) pulse found on carotid;
c) skin cyanosis decreases;
d) spontaneous breaths occur;
e) sclera dry.

84) Actions sequence for rescuing a drowned person 3–4 minutes after drowning:
a) start mouth-to-mouth ventilation;
b) tilt the head back and protrude the lower jaw;
c) position the victim on the back and elevate legs;
d) clear airways from water, silt, seaweed;
e) perform external cardiac massage, alternating with ventilation.

85) Methods of temporary bleeding control include:
a) bandaging the vessel in the wound;
b) applying a styptic clip;
c) forcibly bending the limb;
d) bandaging along the vessel.

86) The final stop of intra-abdominal bleeding is provided during:
a) pre-medical aid;
b) first aid;
c) qualified care;
d) specialized care.

87) Victims in reversible decompensated shock should be evacuated immediately if:
a) pelvic fracture and bladder rupture;
b) gunshot fracture of the hip;
c) lung wound and pneumothorax;

d) ongoing intra-abdominal bleeding;
e) all victims in decompensated shock must be evacuated immediately.

88) Contraindication to emergency surgery in intra-abdominal bleeding includes:
a) reversible compensated shock;
b) reversible decompensated shock;
c) agonic state.

89) Actions during transfusion shock include:
a) paranephric blockade;
b) Shkolnikov blockade;
c) heparin administration;
d) intravenous calcium chloride;
e) donor plasma transfusion.

90) Blood transfusion is necessary during first aid in cases of:
a) ongoing intra-abdominal bleeding;
b) severe bleeding from femoral artery after applying a clip;
c) ongoing pleural bleeding;
d) in first aid, transfusions are generally not performed.

91) To compensate for severe blood loss during first aid, use:
a) only crystalloids;
b) only colloids;
c) both colloids and crystalloids;
d) mainly blood and components.

92) Passive joint movements are absent when ischemia is:
a) compensated;
b) decompensated;
c) irreversible.

93) Indications for urgent restoration of damaged vessels are absent when ischemia is:
a) compensated;
b) decompensated;
c) irreversible.

94) Temporary shunting of a vessel can be used for the first time during:
a) first medical aid;
b) qualified;
c) specialized.

95) Anesthesia options for thoracic injury during first aid include:
a) vagosympathetic block;
b) paravertebral block;
c) Shkolnikov block;
d) superficial block;
e) endotracheal anesthesia.

96) Anesthesia for primary surgical treatment of a wound in the upper third of the hip can include:
a) intra-pelvic Shkolnikov block;
b) superficial block;

c) femoral nerve block;
d) general anesthesia;
e) sciatic nerve block;
f) epidural anesthesia.

97) Intraosseous anesthesia can be used in:
a) pre-medical aid;
b) first aid;
c) qualified;
d) specialized.

98) Anesthesia with Vishnevsky's hard creeping infiltrate is used during:
a) pre-medical aid;
b) first aid;
c) qualified;
d) specialized.

99) Actions during first aid for a person with a hip fracture and pain include:
a) anesthetize the affected area;
b) administer narcotic analgesics;
c) block the sciatic nerve;
d) immobilize for transport.

100) The most effective anesthesia method in first aid for an open shin fracture is:
a) fracture site block;
b) field block;
c) epidural anesthesia.

Answers

1-c	2-a	3-d	4-b	5-c	6-a	7-b	8-a,b,c	9-b,c	10-b,c
11-b	12-b,d	13-a,b,c	14-a,c	15-b,c	16-c	17-b	18-a	19-c	20-b
21-b	22-a	23-a,c	24-c	25-b,d	26-a,c	27-a,d	28-d	29-a,c	30-c
31-b	32-a,b,c	33-b,d	34-c	35-b	36-b	37-c	38-b	39-b	40-b
41-d	42-b,c	45-b	44-b,d	45-b,d	46-a	47-a,b,c,d	48-c,d	49-b	50-c,d
51-b,e	52-a,c	53-c	54-b	55-c	56-c	57-c,e	58-b,c	59-b,c	60-a,c,d,e
61-a,c,d	62-d	63-b	64-a,b,c,d,e	65-c,d	66-c	67-c	68-c	69-b,c,d,e	70-b
71-c	72-a,b,d	73-b	74-b	75-c	76-a	77-a	78-d	79-b	80-f
81-c	82-b	83-b,c	84-d,e	85-a,b	86-c,e	87-e	88-вс	89-a,c,d	90-d
91-c	92-c	93-c	94-b	95-a,b	96-d,f	97-c,d	98-b	99-b,d	100-c

2. Midterm assessment (exam)

The exam includes:
- two theoretical points for oral quiz
- one practical skills assessment task
- results of the formative assessment test

Points for oral quiz

1. Russian Disaster Medicine Service (RDMS): objectives, organizational principles, modes of operation.
2. RDMS: management, coordination bodies, management bodies. Legislative and regulatory framework for RDMS activities.
3. Institutions and formations of RDMS: organizational structure and characteristics.
4. Formation of RDMS for providing pre-medical and first medical aid.
5. Formation of RDMS for providing qualified and specialized medical care.
6. Medical service of civil defense: management and governing bodies.
7. Medical service of civil defense: formations and institutions.
8. Formation of RDMS for conducting sanitary and anti-epidemic actions.
9. Phases of rescue operations following emergencies in peacetime and wartime.
10. Conditions determining the system of medical-evacuation support for the population in emergencies during peacetime and wartime.
11. The essence of the system of medical-evacuation support for the population in emergencies during peacetime and wartime.
12. Medical care (MC): definition of MC and types of MC.
13. The scope of medical care (MC): definition, purpose, and types of MC.
14. Types of medical care: first aid in emergency situations during peacetime and wartime — definition, procedure, optimal timing, and measures.
15. Types of medical care: first aid during emergencies in peacetime and wartime — definition, procedure, optimal timing, and interventions.
16. Types of medical care: first medical aid during emergencies in peacetime and military settings — definition, procedure, timing, and interventions.
17. Types of medical care: qualified medical assistance in emergencies during peacetime and wartime — definition, procedure, timing, and activities.
18. Types of medical care: specialized medical assistance during emergencies in peacetime and wartime — definition, procedure, timing, and arrangements.
19. Types of medical care: medical rehabilitation during emergencies in peacetime and military settings — definition and procedures.
20. Medical sorting of the affected: definition, purpose, types, organization, characteristics, and groups.
21. Organization of medical sorting for seriously affected victims during medical evacuation.
22. Organization of medical sorting for those less affected during medical evacuation.
23. Medical evacuation of victims during emergencies in peacetime and wartime: definition, purpose, content, types, principles, methods, and requirements.
24. The stage of medical evacuation: definition, schematic diagram of the process, and organization of functional units.
25. Types of medical evacuation stages in the system of support for affected populations during emergencies in peacetime and wartime.
26. Organization of medical-evacuation measures during emergencies in peacetime and wartime.
27. Features of organizing medical care and evacuation for children during emergencies in peacetime and wartime.
28. Features of medical care during radiation accidents.
29. Features of medical care during chemical accidents.
30. Features of medical care during biological accidents.
31. Organization of medical-evacuation support for populations in local armed conflicts.

32. Terrorism and terrorist acts: medical care for the population during such events.
33. Medical care for the population after chemical emergencies.
34. Sources of chemical hazards, basic concepts of toxicology, and the medical and tactical characteristics of chemical injuries.
35. Sources of chemical hazards: classification of toxic and highly toxic substances.
36. Poisoning with highly toxic substances: main mechanisms of interaction between toxicants and the body.
37. Concept of hazardous chemicals: toxicological and clinical classification of chemical agents.
38. General principles of emergency care and antidote therapy.
39. Pulmonary toxic substances: medical and tactical features, mechanisms of action, clinical presentation, and medical management at various stages.
40. Carbon monoxide: mechanism of toxicity, clinical presentation, and medical management during lesions and evacuation.
41. General toxic substances: characteristics, mechanisms, clinical features, and management during lesions and evacuation.
42. Cytotoxic toxic substances: features, mechanisms, clinical presentation, and management during lesions and evacuation.
43. Neurotoxic substances: features, mechanisms, clinical presentation, and management during lesions and evacuation.
44. Irritant/toxic agents: features, mechanisms, clinical presentation, and management during lesions and evacuation.
45. Features of medical-evacuation support (organizational, therapeutic, diagnostic measures, resources) during chemical incidents in peacetime and wartime.
46. Healthcare of the population after radiation emergencies in peacetime and wartime.
47. Medical and sanitary treatment of populations during mitigation of radiation accident consequences in peacetime and wartime.
48. Types of ionizing radiation, their properties, and methods for quantitative assessment.
49. Classification and brief description of radiation accidents; zones of radioactive contamination.
50. Radiation injuries: factors causing damage during nuclear explosions and radiation accidents.
51. Medical characteristics of radiation injuries: immediate and long-term effects.
52. Medical care for populations after radiation accidents: prophylaxis and treatment of radiation injuries.
53. Healthcare response to floods.
54. Medical care after earthquakes.
55. Healthcare response to hurricanes and typhoons.
56. Medical care for victims of road traffic accidents.
57. Medical care for victims of emergencies involving explosives and flammable substances.
58. Sanitary and anti-epidemic (preventive) measures during emergencies in peacetime and wartime: definition, content, classification, and main activities.
59. Organization and implementation of sanitary and anti-epidemic measures among the population during emergencies.
60. Organization and tasks of observation and laboratory control networks.
61. Features of organizing and conducting sanitary-anti-epidemic (preventive) measures during infectious disease outbreaks.
62. Objectives and principles of supplying medical equipment to RDMS units.
63. Features of providing medical organizations with medical supplies during emergencies in peacetime and wartime.
64. Classification, storage, and management of medical supplies for emergency use.
65. Measures to ensure medical personnel readiness during emergencies: training methods and forms.

Practical skills assessment

№1. The victim is still, does not respond to calls. No visible breathing. Pulse on the radial and carotid arteries is not detectable. *What are your actions?*
№2. The victim is still, does not respond to calls. No visible respiration or pulse on the radial artery. The pulse on the carotid artery is barely detectable. The right shin is cut at the upper third. No visible bleeding. Clothes are soaked in blood. The terrain is hilly; air temperature is +30°C. *What are your actions?*
№3. The victim is still. Exhibits jitteriness. Breathing is labored, with retraction of the supraclavicular areas. Lips are cyanotic. Traces of vomit are on clothing. There is a graze and limited swelling of soft tissues in the right fronto-temporal region. The pulse is infrequent. It is in the city, raining. *What are your actions?*
№4. The face is covered in blood. The lower jaw is deformed and displaced backward. The patient is unconscious. Breathing is irregular (agonal). Pulse is frequent. The area is woody and marshy. Air temperature is 15°C. *What are your actions?*
№5. The wounded is conscious, anxious, complaining of shortness of breath. Breathing is rapid and shallow. Cyanosis of the face is present. Pulse is frequent. In the left infrascapular area, there is a moderate bleeding wound of 2–3 cm. There is marked subcutaneous emphysema of the trunk, head, and upper extremities. The patient is outdoors. Air temperature is -5°C. *What are your actions?*
№6. The face is covered with blood. Consciousness is confused; the patient is groaning. In the left malar region, there is a 5–8 cm wound with heavy bleeding. The eye is injured. *What are your actions?*
№7. The conscious wounded is exhausted. A cross-shaped wound of 8–2 cm is present on the right side of the neck with profuse bleeding. The terrain is woody. Air temperature is -28°C. *What are your actions?*
№8. The patient complains of pain in the right infrascapular area, where clothes are punctured by a splinter and soaked with blood. Pulse is slightly elevated. The terrain is woody and marshy. Air temperature is 8°C. *What are your actions?*
№9. The patient complains of moderate pain in the wounded abdomen. Clothes from the waist down are torn and blood-soaked. A 3 cm wound with moderate bleeding is present in the right paraumbilical region. The patient is outdoors. Air temperature is 15°C. *What are your actions?*
№10. The wounded has a bandage on a hip wound. The bandage and clothes are soaked with a large amount of blood. Air temperature is 40°C. *What are your actions?*
№11. During a terrorist attack, the wounded was injured by a landmine. He is conscious, groaning. The right lower limb hangs on a skin flap at the level of the upper third of the leg. The wound bleeds moderately. There is a 6–3 cm wound with heavy bleeding on the front-lateral surface of the neck on the left. The left foot is destroyed but does not bleed. The terrain is city, air temperature is 3°C. *What are your actions?*
№12. The patient's both lower extremities up to the mid-thighs were pressed down with a slab 3 hours ago. The patient is conscious, groaning from pain. He is trying to free himself from under the blockage. The terrain is outdoor. Air temperature is 20°C. *What are your actions?*
№13. The patient was thrown by the blast wave. He is unconscious, with bleeding from ears, nose, and mouth. Traces of vomit are on clothing. Breathing and pulse are slightly elevated. The terrain is wooded. Air temperature is 6°C. *What are your actions?*
№14. The patient fell headfirst from a moving vehicle. He is sluggish and unresponsive. When shouted at, he opens his eyes. His arms and legs hang limply. Breathing is regular. Pulse is rapid. The patient is lying on the roadside. Air temperature is 14°C. *What are your actions?*
№15. The patient complains of sharp pain in the lumbar spine area, where there is a 4*4 cm wound with minor bleeding. Active movement of the lower extremities is absent. The scene is a working settlement. Air temperature is 14°C. *What are your actions?*
№16. The patient has a stomach wound. He is groaning. There is an extensive wound on the anterior abdominal wall with eviscerated intestinal loops. The pulse is weak. The scene is outdoors. Air temperature is 7°C. *What are your actions?*
№17. The patient was rescued from under a overturned truck. He complains of severe pain in the lower abdomen and pelvis. His legs are slightly abducted. The skin is pale, with sweat on his forehead. Tachycardia and weak pulse are present. Air temperature is 5°C. *What are your actions?*

№18. The patient complains of pain in the right shin, which he is holding with his hands. The shin is abnormally displaced outward. Attempting to straighten the leg causes sharp pain. Nearby are floodplains overgrown with reeds. Air temperature is 18°C. *What are your actions?*
№19. The patient was struck by an electric current from a falling power line. He is unconscious. The chest is not moving. The pulse on the carotid artery is rapid and weak. The fingers of the right hand are covered with a black scab. The terrain is woody. Air temperature is 10°C. *What are your actions?*

Answer 1: The absence of respiration and blood circulation indicates that the wounded man is dead.
Answer 2: Lack of respiration with preserved, albeit weakened, blood circulation (presence of a pulse in the carotid artery) indicates that the victim is in a terminal state due to destruction of the lower leg, massive blood loss, and dehydration (temperature +30°C). Immediate threat to life from respiratory arrest.
First aid:

1. Mechanical ventilation
2. If spontaneous breathing resumes — administer anesthesia and apply a tourniquet above the wound
3. Wound dressing
4. Immobilize the injured limb by stabilizing it to a healthy limb
5. Note the date and time of applying the tourniquet
6. Give plenty of water if swallowing is possible
7. Move the wounded to shelter (e.g., the reverse slope of a hill) and position them on their side to prevent the tongue from falling back
8. Cover with a medical cape to prevent overheating
9. Prioritize evacuation
10. If spontaneous breathing does not resume within five minutes or the pulse disappears, declare the victim dead. Stop resuscitation efforts and begin providing medical assistance to other affected individuals.

Answer 3: Presence of a graze and swelling in the right temporal area, lack of consciousness, and traces of vomit indicate a severe closed skull injury. Suffocation likely results from aspiration of vomit and tongue swelling.
First medical aid:

1. Place a roll under the shoulders
2. Tilt the head back, open the mouth, and move the lower jaw forward
3. Clear vomit from the mouth and pharynx with a finger
4. Insert an airway device
5. Transport the patient on their side or stomach from the street to the nearest shelter, securing them in a stable position on one side
6. The case requires priority medical treatment

Answer 4: Deformation and backward shift of the lower jaw indicate a fracture. Suffocation is caused by tongue swelling and possible blood aspiration (face blood-drenched).
First medical aid:

1. Place a roll under the shoulders
2. Tilt the head back, open the mouth, and move the lower jaw forward
3. Clear blood clots from the mouth and pharynx with a finger
4. Insert an airway device
5. Immobilize the lower jaw with a sling bandage
6. Move the patient to shelter and secure in a stable side position
7. This case requires priority medical treatment

Answer 5: : Complaints of suffocation and a wound in the left infrascapular area with subcutaneous emphysema indicate progressing tension pneumothorax on the left, threatening life due to increasing intrapleural pressure and mediastinal shift.
First medical aid:

1. Apply an occlusive bandage with a valve over the chest wound
2. Administer anesthesia
3. Position the patient semi-sitting
4. Cover with a medical cape to prevent hypothermia

Answer 6: Bright red bleeding from a wound in the left malar area indicates arterial bleeding.
First medical aid:

1. Apply manual pressure to the left carotid artery to stop bleeding
2. If bleeding persists, use a bandage with a pad applied over the artery to compress against the spine
3. Apply a pressure bandage
4. Place the patient in a stable position
5. This case is a priority for evacuation

Answer 7: The patient has arterial bleeding.
First medical aid:

1. Stop bleeding by manual pressure on the right carotid artery and bandage with a pad over the wound, with the bandage applied over the raised left hand
2. Administer anesthesia
3. Provide the patient with plenty of water
4. Cover with a medical cape to prevent hypothermia
5. This case is a priority for evacuation

Answer 8: Clothes moderately soaked with blood around a wound in the right infrascapular area, with no signs of breathing or circulatory disturbance, indicate soft tissue injury that is not life-threatening.
First medical aid:

1. Apply a compressive bandage with a pad
2. Administer anesthesia
3. Transport the patient to a safe area for minor injuries

Answer 9: A small, moderately bleeding wound in the paraumbilical area with the patient in satisfactory condition indicates a soft tissue injury of the anterior abdominal wall.
First medical aid:

1. Apply a compressive bandage
2. Administer anesthesia
3. Transport to a designated point for minor injuries

Answer 10: A heavily blood-soaked bandage indicates ongoing arterial bleeding from a hip wound.
First medical aid:

1. Apply a styptic tourniquet immediately above the bandage
2. Administer anesthesia
3. Place an additional bandage over the blood-soaked one
4. Record the date and time of application and put the note under the tourniquet
5. Immobilize the injured limb
6. Provide water to drink
7. Cover with a medical cape to prevent hypothermia
8. This case is a priority for evacuation

Answer 11. The wounded has multiple injuries: a heavily bleeding wound on the anterolateral surface of the neck on the left, a separated right shin with moderate bleeding, and an extensive wound on the left foot that is not bleeding.
First medical aid:

1. Stop bleeding from the neck wound by manual compression of the left carotid artery against the spine, then apply a compressive bandage with a pad over the wound, with the bandage applied over the raised right hand.
2. Apply pressure dressings (tourniquet) immediately above the wounds on the right shin and on the lower third of the left shin.
3. Administer anesthesia.
4. Bandage the wounds.

5. Immobilize the lower extremities.
6. Provide plenty of water for drinking.
7. Note the date and time of applying the tourniquet.
8. This case requires priority medical evacuation.

Answer 12. The duration of constriction of the extremities exceeds 2 hours, so it is necessary to anticipate the syndrome of prolonged compression after release. The immediate danger to life may be caused by severe intoxication, which generally develops after decompressing.

First medical aid:

1. Administer anesthesia.
2. Release the victim from under the constriction.
3. Apply medical pneumatic splints or use tight bandages on the constricted extremities up to the area of compression.
4. If possible, cool the extremities with bandages moistened in cold water.
5. Evacuate in order of priority.

Answer 13. Features such as lack of consciousness, bleeding from ears, nose, and mouth, and traces of vomit indicate a severe closed head injury and brain contusion. The life-threatening aspect may arise from tongue-swallowing (airway obstruction).

First medical aid:

1. Position the patient steadily on one side.
2. Cover with a medical cape to prevent hypothermia.
3. This case requires priority medical treatment.

Answer 14. The patient has severe head and spinal injuries, with risk of life-threatening complications due to tongue swelling and airway obstruction.

First medical aid:

1. Immobilize the spine on a firm board.
2. Insert an airway device.
3. This case requires priority medical treatment.

Answer 15. The spinal column and spinal cord are injured.

First medical aid:

1. Administer anesthesia.
2. Bandage any wounds.
3. Immobilize the spine on a firm board.
4. Evacuate in order of priority.

Answer 16. The patient has a severe stomach wound, posing an immediate threat to life.

First medical aid:

1. Administer anesthesia.
2. Apply a bandage to the stomach wound, ensuring no internal organs are expelled but stabilized with the bandage against the abdominal wall.
3. Cover the patient with a medical cape to prevent hypothermia.
4. This case requires priority medical treatment.

Answer 17. There is a severe injury to the pelvis and pelvic organs.

First medical aid:

1. Administer anesthesia.
2. Immobilize the pelvis by placing the patient on a blanket with clothes under the knees. To prevent excessive movement, secure the limbs with bandages.
3. Prevent hypothermia.
4. This case requires priority medical treatment.

Answer 18. The patient has a closed fracture of both bones of the shin, with possible damage to neurovascular structures and the skin.

First medical aid:

1. Administer anesthesia.
2. Immobilize the right shin using splints or improvised materials (e.g., sticks, reeds).

3. Assist the patient in moving to a safe location.
4. Evacuate in order of priority.

Answer 19. There is an end-of-life situation due to electrical injury. The immediate threat to life is respiratory failure.

First medical aid:

1. Disconnect the victim from the electrical source.
2. Provide artificial ventilation.
3. Once breathing is restored, position the patient semi-sitting.
4. This case requires priority medical treatment.