

## **The list of questions for the exam in the discipline "Life Safety"**

1. The concept of life and safety. Safety levels.
2. Objects of life safety. Classification of structural safety levels and their characteristics.
3. The concept and classification of emergency situations.
4. Characteristics of the states of the "human-environment" system. The concept of comfort, affordability.
5. Principles and methods of ensuring life safety in the "human-environment" system.
6. Classification of negative factors of the technosphere.
7. Types of human labor activity.
8. Comfort criteria in the technosphere (energy balance, heat transfer, microclimate, anthropometry).
9. Working capacity and rest.
10. Characteristics and negative impact of acoustic, vibrational and electromagnetic factors on a person.
11. Types of ionizing effects and their damaging ability.
12. Hazard classes of toxic substances, their characteristics.
13. Antidotes.
14. Radioprotectors.
15. Quarantine. Observation. The concept of ongoing activities.
16. Nuclear weapons and their damaging factors.
17. Chemical weapons, classification and brief characteristics of poisonous substances.
18. Bacteriological (biological) weapons, a brief description of toxins and pathogenic microbes.
19. Characteristics of protective structures.
20. Characteristics of personal protective equipment.
21. Definition and measures of medical protection. Medical protective equipment and their use. Standard medical personal protective equipment.
22. Medical and psychological protection of the population and rescuers in emergency situations.
23. Psychotraumatic factors of emergency situations.
24. Measures to prevent and eliminate the consequences of emergencies in medical healthcare institutions.
25. Protection of medical personnel, patients and property.
26. Organization of the work of a medical institution in emergency situations.
27. The concept of medical evacuation measures. Basic principles of evacuation organization. Stages of medical evacuation: definition, tasks.
28. Medical sorting of the injured. Definition. Purpose and types of sorting.
29. Medical evacuation: definition, purpose, principles of organization, methods, requirements. Preparation for evacuation. The concept of non-transportability, its criteria, terms of non-transportability.
30. Features of the organization of medical care for children and adolescents, the elderly in emergency situations.
31. Medical and sanitary support during the liquidation of the consequences of chemical accidents.
32. Medical and sanitary support during the liquidation of the consequences of radiation accidents.
33. Features of medical and sanitary support during terrorist acts.
34. Fundamentals of the organization of medical care in the focus of earthquakes.
35. Principles of providing medical assistance in case of flooding.

36. Principles of providing medical care when people fall under snow avalanches.
37. Principles of providing medical assistance to victims of mudflows.
38. Principles of providing medical care to victims of fires.
39. Sanitary and anti-epidemic provision of the population in emergency situations. Tasks, principles and main activities.
40. Damage by irritating poisonous substances (CN, CS, CR, adamsite). Physical and chemical properties, mechanism of action, clinical manifestations, first aid.
41. Defeat by poisonous substances of asphyxiating action (phosgene, chlorine, ammonia). Physical and chemical properties, mechanism of action, clinical manifestations, first aid.
42. Poisoning with hydrocyanic acid and cyanides. Physical and chemical properties, mechanism of action, clinical manifestations, first aid.
43. Dioxin poisoning. Physico-chemical properties, mechanism of action, clinical manifestations, consequences.
44. Botulinum toxin poisoning. Physical and chemical properties, mechanism of action, clinical manifestations, first aid.
45. Tetanotoxin attack. Physical and chemical properties, mechanism of action, clinical manifestations, first aid.
46. Defeat by toxic substances of psychochemical action (LSD and BZ). Physical and chemical properties, mechanism of action, clinical manifestations, first aid.
47. Poisoning with poisonous technical liquids (methanol, ethylene glycol, dichloroethane, tetraethyl lead). Physical and chemical properties, mechanism of action, clinical manifestations, first aid.
48. Carbon monoxide poisoning. Physical and chemical properties, mechanism of action, clinical manifestations, first aid.
49. Defeat by poisonous substances of cytotoxic action (mustard gas, lewisite). Physical and chemical properties, mechanism of action, clinical manifestations, first aid.
50. Damage by organophosphorus toxic compounds (sarin, soman, Vx). Physical and chemical properties, mechanism of action, clinical manifestations, first aid.
51. Special treatment. Definition, types, methods and means.
52. Means and methods of chemical and radiation reconnaissance and control.
53. Damage due to internal radioactive contamination. Local radiation injury.
54. The concept of acute radiation syndrome. Classification of acute radiation sickness.
55. Forms of acute radiation syndrome (bone marrow, intestinal, toxemic, cerebral): clinical manifestations, first aid.
56. All-Russian center of Disaster Medicine, VSMK "Defence" and its functions.

**Evaluation of personal results corresponding to the working program of education, when mastering the discipline**

An electronic survey is proposed to identify the assessment of the achievement of each student's personal result on the educational portal of the South Ural State Medical University <http://do.chelsma.ru>. The student passes electronic questioning until the last training session in the discipline.