MINISTRY OF HIGHER EDUCATION, SCIENCE AND INNOVATIONS OF THE REPUBLIC OF UZBEKISTAN MINISTRY OF HEALTHCARE OF UZBEKISTAN TASHKENT MEDICAL ACADEMY DEPARTMENT OF EPIDEMIOLOGY



#### SYLLABUS ON PREVENTIVE MEDICINE AND PUBLIC HEALTH

Field of knowledge: Field of education: Direction of education: 500 000 510 000 5510300 - Healthcare and social affairs

- Healthcare
- 5510300 Preventive medicine

Module codes EHE16-1018		Academic year 2023/2024; 2024/2025; 2025/2026	<b>Semester</b> 6-7-8-9-10	<b>Credits</b> 18	
Module type		Language of education		Class hours per week	
Mandatory		Uzbek/Russian		3/4/2/5/4	
1.	Name mode	Auditorium training (hours)		Independe nt education (hour)	Total download (hour)
	Epidemiology. Military epidemiology	27	0	270	540

# I. Contents of the module

## Epidemiology

The module program was created based on the State Education Standard of the Republic of Uzbekistan and the qualification requirements of the undergraduate education. The epidemiology module teaches students of medical universities how to systematically organize the prevention of diseases, proper nutrition and increase physical activity in the maintenance of public health, and the wide promotion of a healthy lifestyle, that is, the prevention of diseases and their prevention, provides an opportunity to acquire the necessary knowledge to be able to apply it for the purpose of early detection, and also creates the ground for the organization of epidemiological assistance to the population in future doctors. At the end of the program's goals and objectives, the student combines the knowledge and practical skills acquired in the processes of horizontal and vertical integration to become a mature, competitive, independent thinking general practitioner.

2.

This module is based on the knowledge acquired from the modules of medical biology and genetics, human anatomy, normal physiology, bioorganic, bioinorganic and biological chemistry, microbiology, general hygiene and infectious diseases modules in the curriculum, by forming epidemiological thinking in students, protecting the population from epidemics and epidemiological control teaches to do.

#### Military epidemiology

The armed forces of the Republic of Uzbekistan operate as an important guarantor of national security, state sovereignty and territorial integrity, and the peaceful life of its residents. To educate the future generation in the spirit of patriotism, to be able to act boldly without losing one's identity in various extreme conditions, to be able to accept the role of management in necessary situations, to prevent the origin and spread of various diseases among the personnel, to prevent the soldiers of the military unit from contracting these diseases teaching them to pay attention is of great importance.

During the war, the medical service performs the most important tasks of providing

timely medical care to the wounded and sick on the battlefield and during the medical evacuation stages. have a deep knowledge of the methods of travel, combat pathology, know how to organize and implement treatment-evacuation, sanitary-hygienic and antiepidemic measures, measures to protect personnel from the enemy's weapons of mass destruction, and have sufficient organizational skills should take. This module is based on the knowledge acquired from the medical biology and genetics, human anatomy, normal physiology, bioorganic, bioinorganic and biological chemistry, microbiology, general hygiene and infectious disease modules in the curriculum, by forming epidemiological thinking in students, protecting the military from epidemics and epidemiological control. teaches to do.

The purpose of teaching the module is to provide students with knowledge, skills and competence about methods of examination of organs and systems and the semiotics of their main diseases based on the anatomical and physiological characteristics of children's bodies of different ages.

**Military epidemiology.** Aspects such as training students in theoretical and practical aspects of military epidemiology in the necessary volume to perform functional tasks according to the assigned task, raising the future generation in the spirit of patriotism, and being able to move boldly without losing their identity in various extreme conditions. consists of formation.

The task of the module is to teach students, taking into account the anatomical and physiological features of the child's body; providing indicators of physical and psychomotor development of children of different ages; teaching to communicate with healthy and sick children and their parents and to collect anamnesis; teaching methods of objective examination and forming practical skills; teaching the symptoms and syndromes of the main diseases of the child's body; teaching healthy children the basic rules of rational feeding.

**Military epidemiology.** theoretical training of specialists in military epidemiology based on the achievements of modern science and practice and using the most progressive methods of training; training in the theoretical and practical issues of military epidemiology to perform their duties according to the requirements of the situations during the martial law; conducting an epidemiological inspection and sanitary-epidemiological reconnaissance in the hearths, as well as monitoring the areas where combat operations are being carried out, early identification of the sources, ways and factors of infection of infectious diseases; to be able to give instructions for carrying out sanitary and cleaning work in the oven, to use the preparations and technical means necessary for carrying out disinfection and sterilization; know how to move when bacteriological weapons are used, how to put on and take off special protective clothing head sets; draw up reports and documents on sanitary-epidemiological inspection of various military facilities; developing measures for mastering the features of conducting preventive and anti-epidemic measures in quarantine and highly dangerous infections,

taking tests for the special indication (detection) of biological agents, filling out relevant documents and sending the tests to epidemiological institutions exit; forms such as teaching to promote a healthy lifestyle; It consists of preparing a specialty that meets the qualification characteristics of a military doctor and the requirements of the "Medical preventive work" specialty at the primary level of health care.

### II. The main theoretical part

### **II.I.** The module includes the following topics:

#### **Epidemiology:**

### 6th semester:

**10 p.m. lecture1 topic**. Epidemiological approach to the study of infectious diseases. (The role of epidemiology in the medical education system and among modern medical sciences. The history of the development of epidemiology)

**Topic 2.** The doctrine of the epidemiological process. Methods of epidemiological investigation. Manifestations of the epidemic process and their interpretation. Mechanism of transmission of infectious diseases and theories of natural outbreaks. The theory of self-control of the parasitic system. Classification of infectious diseases and evolutionary development of pathogens.

**Topic 3**. Epidemiological importance of animals and arthropods that spread disease-causing agents. Sanitary-veterinary measures in zooanthropozonous diseases.

**Topic 4:** Definition, types, methods of disinfection, disinsection, deratization and sterilization. Disinfection, disinsection, deratization and sterilization. Importance of disinfection, disinsection, deratization and sterilization in the prevention of infectious diseases.

**Topic 5**. Immunoprophylaxis. Prophylactic vaccination. Vaccination calendar comparison with foreign literature. Organization of vaccination work in family polyclinics. The quality and efficiency of vaccination work at the initial links (primary link) of the health care system.

#### Epidemiology

Semester 7:

#### 12 p. lecture

**Topic 1:** Classification and characteristics of intestinal infections. Diarrhea, paratyph A and V etiology, epidemiology. Organization and implementation of epidemiological control of internal sweating and bacterial carriers, measures to be taken against workers in public catering establishments.

**Topic 2:** Epidemiology, prevention of salmonellosis. Manifestation of the epidemic process in salmonellosis. Epidemiology and prevention of shigellosis. Organization of epidemiological control over shigellosis diseases and its content.

**Topic 3.** Epidemiology and prevention of poliomyelitis. Organization of epidemiological control over poliomyelitis disease

**Topic 4.** Classification of viral hepatitis. Epidemiology and prevention of hepatitis A and E. Organization of epidemiological control over viral hepatitis A and E disease. Epidemiology and prevention of hepatitis B, D, C. Organization of epidemiological

control over viral hepatitis B and D disease.

**Topic 5.** Epidemiology and prevention of cholera. Organization and implementation of epidemiological control in cholera. Organization of anti-epidemic activities in cholera outbreaks. Duties of the district doctor when a cholera patient is identified.

**Topic 6.** Classification of helminthiasis. Epidemiology and prevention of geohelminthosis and contact helminthosis. Organization of epidemiological control over enterobiosis and ascariasis. Epidemiology and prevention of biohelminthosis. Epidemiology, prevention and epidemiological control of malaria. Etiology, clinic, diagnosis of malaria, "National strategy of elimination of malaria in the Republic of Uzbekistan.

#### Military epidemiology.

#### 8th semester:

### 6 p. lecture

**Subject 1.** About the science of military epidemiology. Developmental patterns of the epidemic process among military communities. Departments and tasks of military epidemiology. Theoretical and methodological foundations of military epidemiology. The mechanism of the development of the epidemic process in the troops.

**Topic 2.** System of anti-epidemic measures carried out in military units. Forces and means to be involved in conducting and organizing anti-epidemic measures among the troops.

**3rd topic.** Bacteriological (Biological) weapon. Definition of bacteriological weapon. History of use. Combat aspects and description of bacteriological weapons. Bacterial recipes, their grouping, methods of application and means of delivery. Mechanism of development and levels of manifestation of artificially induced epidemic process.

## Epidemiology

#### Semester 9-10:

#### 26 pp. lecture

**Topic 1.** General epidemiological classification of respiratory tract infections. Epidemiology and prevention of influenza, URVI and atypical pneumonia.

Topic 2. Etiology, epidemiology and prevention of coronavirus infections.

**Topic 3**. Epidemiology, prevention and epidemiological control of diphtheria.

**Topic 4** Organization of measles, rubella epidemiology, prevention and epidemiological control.

**Topic 5.** Epidemiology, prevention and epidemiological control of meningococcal infections.

**Topic 6.** Epidemiology of nosocomial infections. Epidemiology of nosocomial infections in the surgical department.

**Topic 7.** Epidemiology and prevention of HIV/AIDS infections

**Topic 8.** Tuberculosis epidemiology and prevention and epidemiological control.

Topic 9. A retrospective epidemiological analysis of infectious diseases.

Operational epidemiological analysis.

**Topic 10**. Classification of zoonotic infections. Epidemiology, prevention and epidemiological control of rabies, leprosy, anthrax.

Topic 11. Epidemiology, prevention and epidemiological control of plague.

**Topic 12.** Epidemiology, prevention and epidemiological control of typhus, Brill's disease.

**Topic 13** Epidemiology, prevention and epidemiological control of hemorrhagic fevers.

**III.** Instructions and recommendations for practical training:

The following topics are recommended for practical training:

**Epidemiology:** 

6th semester:

10 s. lecture + 35 s. practical. Total 45 s. (8 days)

**Topic 1.** To teach the importance of epidemiology as a scientific study of all pathological processes. The doctrine of the epidemiological process. Teaching the mechanism of epidemiological process development. Manifestations of the epidemic process and their interpretation

**Topic 2.** System and content of epidemiological investigation methods, basic concepts of epidemiological diagnosis. Teaching methods of analytical and epidemiological experiments.

**Topic 3.** Teaching the transmission mechanism of infectious diseases and the theories of natural outbreaks.

**Topic 4.** Organization of anti-epidemic activities among the population in emergency situations. Teaching epidemiological inspection of foci.

**Topic 5.** Disinfection Organization of disinfection service among the population. Structure and work of the disinfection department, stages of disinfection. Sanitary cleaning works. Teaching camera disinfection methods.

**Topic 6.** Getting to know the work of the disinfection department. Camera disinfection, deratization, disinsection. Control over the quality and efficiency of sterilization work in DPMs. Getting to know the work of MSB.

**Topic 7**. The theory of self-control of the parasitic system. Classification of infectious diseases and evolutionary development of pathogens.

**Topic 8**. Epidemiological importance of animals and arthropods that spread diseasecausing agents (mosquitoes, a group of small insects, lice, fleas and ticks). Teaching the epidemiological importance of diseases with natural outbreaks.

Epidemiology

Semester 7:

12 s. lecture + 48 s. practical. Total 60 s. (10 days)

Topic 1: Classification and characteristics of intestinal infections. Organization of

epidemiological control of intestinal group infections. Diarrhea, paratyph A and V etiology, epidemiology. Organization and implementation of epidemiological control in cases of diarrheal diseases and bacterial carriers, measures to be taken against workers in public catering establishments.

**Topic 2:** Shigellosis epidemiology and prevention. Organization of epidemiological control over shigellosis diseases and its content.

**Topic 3.** Teaching the organization of epidemiological control in acute intestinal infections. Teaching the organization of epidemiology and epidemiological control of intestinal infections.

**Topic 4.** Epidemiology and prevention of escherichia. Epidemiology and prevention of enterovirus infections.

**Topic 5.** Epidemiology and prevention of rotoviruses.

**Topic 6.** Epidemiology and prevention of poliomyelitis. Organization of epidemiological control over poliomyelitis disease.

**Topic 7.** Classification of viral hepatitis. Epidemiology and prevention of hepatitis A and E. Organization of epidemiological control over viral hepatitis A and E disease.

**Topic 8.** Epidemiology and prevention of hepatitis B, D, C. Organization of epidemiological control over viral hepatitis B, D, C disease.

**Topic 9.** Epidemiology and prevention of cholera. Organization and implementation of epidemiological control in cholera. Organization of anti-epidemic activities in cholera outbreaks. Duties of the district doctor when a cholera patient is identified.

**Topic 10.** Anti-epidemic measures at the Center for the Prevention of Quarantine and Highly Dangerous Infections.

Military epidemiology.

8th semester:

6 s. lecture + 24 s. practical. Total 30 s. (5 days)

**Topic 1.** About the military epidemiology module. Developmental patterns of the epidemic process among military communities. Departments and tasks of military epidemiology. The mechanism of the development of the epidemic process in the troops.

**Topic 2**. System of anti-epidemic measures carried out in military units. Forces and means to be involved in conducting and organizing anti-epidemic measures among the troops. Teaching the role of medical service and sanitary-epidemiological institutions in the troops in the organization of anti-epidemic measures.

**Topic 3.** Bacteriological (Biological) weapon. Definition of bacteriological weapon. History of use. Combat aspects and description of bacteriological weapons. Bacterial recipes, their grouping, methods of application and means of delivery. Teaching the mechanism of development and levels of manifestation of an artificially induced epidemic process.

**Topic 4.** Sanitary-epidemiological intelligence. Bacteriological intelligence. Basic principles and methods of sanitary-epidemiological intelligence. The main tasks of bacteriological intelligence. Specific and non-specific indication. Teaching to identify stages of special indication.

**Topic 5.** Organization of protection of troops from the effects of anti-epidemic and bacteriological weapons. Concept of protection of troops from bacteriological weapons. The role of commanders, staffs and medical service personnel in the protection of personnel from bacteriological weapons.

#### Epidemiology

Semester 9-10:

26 p. lecture + 109 p. practical. Total 135 p. (22 days)

**Topic 1.** Classification of helminthiasis. Epidemiology and prevention of geohelminthosis and contact helminthosis.

**Topic 2:** Epidemiology and prevention of biohelminthosis.

Topic 3. Organization of epidemiological control over enterobiosis and ascariasis

**Topic 4.** Epidemiology, prevention and epidemiological control of malaria. Etiology, clinic, diagnosis of malaria, "National strategy of elimination of malaria in the Republic of Uzbekistan.

**Topic 5**. Epidemiology and prevention of influenza, ARVI and atypical pneumonia.

**Topic 6.** Organization of epidemiological control over diphtheria disease and teaching its content.

**Topic 7.** Organization of epidemiological control over whooping cough and teaching its content. To study and teach the specific features of epidemiological investigation in scarlet fever foci.

**Topic 8.** Organization of epidemiological control over measles disease and teaching its content. Organization of epidemiological control over rubella disease and teaching its content

**Topic 9.** Teaching the epidemiology, prevention and epidemiological control of meningococcal disease.

**Topic 10.** Organization and implementation of epidemiological control in epidemic parotitis.

Topic 11. An infection caused by the varicella zoster virus (chicken pox and shingles)

**Topic 12.** Teaching the epidemiology and prevention of nosocomial infections. Infections in the field of surgery, infections of the circulatory system, nosocomial pneumonias, nosocomial salmonellosis, urinary tract infections.

Topic 13. Epidemiology and prevention of streptococcosis.

**Topic 14.** Organization of epidemiological control over lung and skin forms of tuberculosis and teaching its content. Organization of epidemiological control over the gastrointestinal tract and bone forms of tuberculosis and its content. Epidemiological control of leprosy.

**Topic 15.** Epidemiology and prevention of HIV/AIDS infections

**Topic 16**. Teaching the epidemiology and prevention of rabies.

**Topic 17.** Epidemiology and prevention of leprosy.

Topic 18. Epidemiology and prevention of anthrax.

Topic 19. Ku - fever epidemiology and prevention.

Topic 20. Epidemiology and prevention of typhus and Brill's disease.

**Topic 21.** Plague epidemiology and prevention. Etiology, diagnosis, epidemiology, epidemic control and preventive measures of chronic sweating.

Topic 22. Prevention of hemorrhagic fever epidemiology.

Practical classes are held separately for each academic group in auditoriums equipped with multimedia devices. Active and interactive methods are used in the training. "Project-based teaching", "Case study" and other technologies are used. Distributed materials and information are transmitted using multimedia devices.

## **IV. Practical skills:**

## Epidemiology

## 6th semester:

1. Forms of insecticide application. Methods used in the fight against rodents.

2. Development of a plan of preventive measures.

3. Development of an anti-epidemic action plan.

4. Treatment of an epidemic furnace using Automax

5. Preparation of working solution of chloramine.

6. Preparation of disinfectant solutions for current disinfection

7. The procedure for the transportation of bacteriological substances and compliance with the cold chain.

# Epidemiology

## Semester 7:

1. Application of bacteriophages in typhoid fever

2. Organizing and conducting anti-epidemic measures in the cholera outbreak

3. Treatment of the epidemiological furnace with the help of a hydraulic control

4. Preparation of disinfectant solution for current disinfection

5. Measures taken against people infected with cholera and those in contact with vibrio carriers

## Epidemiology

## Semester 9-10:

1. Use of anti-plague clothing (suit). Procedure and rules for wearing an anti-plague suit

2. Notification procedure when the patient is suspected of quarantine infection

3. Providing first aid when people are bitten by animals and carrying out antiepidemic measures

4. Carrying out anti-epidemic measures

5. Compilation of a comprehensive action plan for the sanitary protection of the territory against the introduction and spread of quarantine infections

6. Preventive and anti-epidemic measuresV. Mustaqil ta'lim va mustaqil ishlar

Recommended topics for independent education

Epidemiology:

6th semester:

1. The science of epidemiology, its place among medical sciences and in medical

education and practical health care

2. Methods of epidemiological investigation. Current description of the epidemiological method.

3. Epidemic process factors. Epidemiological process development mechanism: Infectious disease transmission mechanism. The theory of natural focus. The theory of self-control of the parasitic system.

4. Disinfection, disinsection, deratization, and sterilization methods and means. Organization of disinfection services among the population.

5. Immunoprophylaxis. Special and rapid preventive vaccinations. Importance of immunoprophylaxis in infectious diseases.

Epidemiology:

Semester 7:

1. Classification and characteristics of intestinal infections

2. Diarrhea, etiology, epidemiology of paratyph A and B.

3. Epidemiology, prevention of salmonellosis

4. Classification of viral hepatitis. Epidemiology and prevention of hepatitis A and E.

5. Anti-epidemic measures at the Center for the Prevention of Quarantine and Highly Dangerous Infections

6. Epidemiology and prevention of cholera. Duties of the district doctor when a cholera patient is identified.

7. General description of sapronosis diseases.

8. Epidemiology and prevention of geohelminthosis and contact helminthosis.

9. Biohelminthosis. Epidemiology and prevention of echinococcal disease.

10. Epidemiology and prevention of malaria

# Military epidemiology:

## 8th semester:

1. Laws of development of the epidemic process among military communities. Departments and tasks of military epidemiology. The mechanism of the development of the epidemic process in the troops.

2. The forces and means to be involved in conducting and organizing anti-epidemic measures among the troops. The role of medical service and sanitary-epidemiological institutions in the troops in the organization of anti-epidemic measures.

3. Combat aspects and description of bacteriological weapons. Bacterial recipes, their grouping, methods of application and means of delivery. Mechanism of development and levels of manifestation of artificially induced epidemic process.

4. Sanitary-epidemiological intelligence. Bacteriological intelligence. Basic principles and methods of sanitary-epidemiological intelligence. The main tasks of bacteriological intelligence. Specific and non-specific indications. Determination of

stages of special indication.

5. Organization of protection of the troops from the effects of anti-epidemic and bacteriological weapons. Concept of protection of troops from bacteriological weapons. The role of commanders, staffs and medical service personnel in the protection of personnel from bacteriological weapons.

6. Measures to be taken in cases where there is a danger of using bacteriological weapons by the enemy and actions to eliminate its consequences in cases where they are used.

### Epidemiologiya:

## Semester 9-10:

1. Modern features of the epidemiology and prevention of respiratory tract infections.

2. The main directions of prevention of respiratory tract infections (general, personal and special). In the case of COVID-19 infection and other infections.

3. The importance of immunoprophylaxis in the fight against respiratory tract infections.

4. Influenza, COVID-19 infection, viral hepatitis and HIV/AIDS infections are problems of the 21st century.

5. Fighting infectious diseases in preventive treatment facilities (DPM) is a component of protecting the health of patients and medical personnel. In the case of COVID-19 infection and other infections.

6. Ways of introducing infection to preventive treatment facilities. Nosocomial infections, source of infection, ways of spread and factors. Etiological composition of nosocomial infections (KII).

- 1. 7. The potential role of health workers in the spread of purulent septic infections (SSI).
- 2. 2. Duties and obligations of a doctor when a patient with quarantine and highly dangerous infections (K and OXI) is identified or suspected.
- 3. 3. Quarantine and the scheme of the immediate reporting procedure when a patient with a highly dangerous infection (K and OXI) is identified or suspected. Antiepidemic measures carried out with persons who were in contact with the epidemic center of K and OXY.
- 4. 4. Characteristics of organizing and carrying out preventive and anti-epidemic measures in quarantine and highly dangerous infections. The procedure and rules for wearing and removing protective clothing against the plague.
- 5. 5. Compilation of a comprehensive plan of measures to limit (limit) (localize) and eliminate (liquidation) infectious diseases.
- 6. 6. Duties and obligations of a doctor and an epidemiologist when a patient with a suspicion (suspect) of the inhalant form of anthrax applies. Epidemiological investigation algorithm.
- 7. 7. Epidemiology, prevention and epidemiological control of ku fever.

	<ol> <li>8. 8. Epidemiology, prevention and epidemiological control of tularemia.</li> <li>9. 9. Epidemiology, prevention and epidemiological control of typhus, Brill's disease.</li> <li>10.10. Improve measures against pediculosis and rickets.</li> <li>11.11. Epidemiology, prevention and epidemiological control of quarantine and extremely dangerous diseases.</li> <li>12.12. Epidemiology, prevention and epidemiological control of plague.</li> <li>13.13. Epidemiology, prevention and epidemiological control of arbovirus infections.</li> <li>14.14. Epidemiology, prevention and epidemiological control of hemorrhagic fevers.</li> <li>15.15. Epidemiology, prevention and epidemiological control of leishmaniasis.</li> <li>16.16. The mechanism of development of the epidemic process in leishmaniasis.</li> <li>17.17. Prevention of epidemiology of HIV/AIDS infections.</li> </ol>
	VI. Educational results/professional competencies
	Epidemiology:
	The student should know:
	6th semester:
	• teaching about the basics of epidemiology and the epidemic process;
	History of Epidemiology development in Uzbekistan;
	• the role of epidemiology in the medical education system and among modern medical sciences.;
	• methods of epidemiological investigation;
	• understanding of the epidemiology of non-communicable diseases;
3.	• to have an idea about the mechanism of transmission, the natural outbreak of infectious diseases and the theories of self-management of the parasitic system; (knowledge)
	• epidemiological classification of infectious diseases;
	• epidemiological importance of insects and animals;
	• get acquainted with the work of the office of infectious diseases;
	• know how to organize and promote preventive and anti-epidemic measures and be able to use them; (skill)
	• to know how to organize measures to prevent and fight against infectious diseases among the population, in treatment and prevention institutions and in epidemic centers;
	• to prove the reliability of hypotheses and the emergence of differences about the risk factors that cause diseases;
	• about preventive vaccination of the population against infectious diseases, special

preventive means, their preparation, storage and vaccination guidelines ("f- 063/x", "f- 5/x", "f-6 /x");

• should have the skills to carry out epidemiological investigation in epidemic foci of infectious diseases and classification of epidemic outbreaks of infectious diseases. (qualification)

## **Epidemiology:**

## 7th semester:

## The student should know:

- the use of bacteriophage for the prevention of typhoid fever;
- drawing up a plan of anti-epidemic measures in the cholera outbreak;
- to prepare the working solution of chloramine;
- to develop a plan of measures against the epidemic;
- collecting epidemiological anamnesis of infectious diseases;
- to have an idea about conducting epidemiological investigations in epidemic centers and outbreaks of infectious diseases; (knowledge)
- etiology, pathogenesis, clinic and epidemiology of common infectious diseases, prevention, principles of anti-epidemic measures, ways to prevent diseases;
- promotion of a healthy lifestyle;
- • to know and be able to use the main factors and criteria of diseases; (skill)
  - egeneral classification of intestinal group infections. Features of the sleep mechanism. Manifestation of the epidemic process. The importance of social and natural conditions in the development of the epidemic process.
  - characteristics of disease observation among urban and rural population. Epidemiological characteristics of intestinal group infections in hospital conditions. Preventive and anti-epidemic measures. Importance of measures activities aimed at transferring the mechanism of transmission. Sanitary and hygienic measures against epidemics. Must have skills (including practical epidemiological skills) in the epidemiology and prevention of the most common diseases. (qualification)
  - Military epidemiology.
  - At the end of the 8th semester:
  - The student should know:
  - • assessment of the sanitary-epidemiological condition of the troops and the areas where they operate;
  - • drawing up reports and documents on sanitary-epidemiological inspection of military facilities
  - • measures carried out during the stages of medical evacuation, measures carried

out in connection with the protection of personnel from bacteriological weapons

- • training of a specialist who can provide full-scale epidemiological support in the military, can carry out preventive and anti-epidemic measures in outbreaks, including in extreme cases.
- • to have an idea about epidemiological control in the military;
- • training of a specialist capable of successfully solving epidemiological, preventive and professional tasks.
- • training of a specialist doctor who is able to master the skills and military medical procedures in the adjacent clinical modules, including the provision of emergency medical care in the military.
- • on the formation and improvement of the system of general and special knowledge and skills that allow the military doctor-epidemiologist to freely think and act on the problems of health care, insurance medicine, medical psychology, health organization and economy should know and be able to use them;
- Collection of prospective epidemiological analysis of infectious diseases and analysis of the obtained results;
- • Selection of reliable and convenient methods of assessing the effectiveness and safety of the analysis of the long-term dynamics of the disease and their implementation, analysis of the obtained results;
- • providing medical and preventive care in situations requiring urgent intervention among the military, timely detection of diseases and their correction;
- • to create an algorithm for the selection of a vaccine in order to carry out effective and safe vaccination in the military and determine the vaccination procedure;
- organization of the work of the active treatment-prophylactic institution, mutual cooperation in the work of separate epidemiological and infectious disease departments, rooms (cabinets) and laboratories, evaluation of the organization of dispensation of military personnel;
- • should have clinical audit skills (including practical skills) in order to improve the quality of medical care provided to military personnel.

# **Epidemiology:**

# Semester 9-10:

# The student should know:

- general epidemiological classification of respiratory tract infections;
- epidemiology and prevention of influenza, URVI and atypical pneumonia;
- epidemiology, prevention and epidemiological control of diphtheria;

	• organization of measles, rubella epidemiology, prevention and epidemiological
	<ul><li>control;</li><li>epidemiology, prevention and epidemiological control of meningococcal infections;</li></ul>
	<ul> <li>retrospective epidemiological analysis of infectious diseases. Operational</li> </ul>
	epidemiological analysis;
	• classification of zoonotic infections. Epidemiology, prevention and epidemiological
	control of rabies, leprosy, anthrax.
	<ul> <li>epidemiology, prevention and epidemiological control of plague;</li> </ul>
	• to have an idea about the epidemiology and prevention and classification of
	quarantine and extremely dangerous infections; (knowledge)
	• general epidemiologic, etiology, pathogenesis, clinic and principles of prevention of
	common quarantine and extremely dangerous infections, ways to prevent blood infections;
	<ul> <li>campaigning on the prevention of blood infections;</li> </ul>
	<ul> <li>collection of epidemiological data on blood infections, determination of the number</li> </ul>
	of patients, analysis of disease dynamics, regional analysis, analysis of the
	composition of patients and identification of risk groups, formation of a hypothesis
	about possible hidden risk factors;
	• Cohort tests on blood infection, sources of errors in epidemiological tests and ways
	to eliminate them, know and be able to use methods of epidemiologic examination of
	foci; (skill)
	• epidemiology and prevention of nosocomial infections: main categories of sources
	of nosocomial infection, ways and factors of spread of nosocomial infection,
	etiological and epidemiological classification;
	<ul> <li>epidemiology and prevention of blood infections.</li> <li>epidemiology and prevention of whooping cough;</li> </ul>
	<ul> <li>the development mechanism of the epidemic process in respiratory tract infections.</li> </ul>
	Epidemiological characteristics and epidemiological effectiveness of special
	prevention, etiology, description of the causative agent, source of infection and ways
	of transmission, epidemiological significance of various clinical manifestations, anti-
	epidemic measures, mechanisms of transmission to the source of infection and to
	those who communicate with patients should have skills (including practical
	epidemiological skills) on measures. (qualification)
	VII. Educational technologies and methods
4	• Interactive games;
4.	• Seminar (logical thinking, quick questions and answers);
	• Work in groups;
	15
	15

	• Introduction of presentations;		
	• Individual projects;		
	• • Projects for teamwork and protection.		
_	VIII. Requirements for obtaining loans:		
5.	Completion of tasks and tasks given in the current control form, successful submission of intermediate and final control types.		
	Basic literature		
	Epidemiology:		
	1. Mirtazaev O.M., Zueva L.P., Matnazaqrova G.S. Epidemiology. Textbook. Tashkent, "Music" publishing house, printing department of "Renaissance Press" LLC, 2020.		
	2. Mirtazaev O.M., Zueva L.P., Matnazarova G.S. Epidemiology. Textbook. Tashkent, "Trust LLC", 2016.		
	3. Briko N.I., Pokrovsky V.I. Epidemiology. Textbook. M.: "GEOTAR-Media", 2015. (e.ver)		
	4. Mirtazayev O.M. and other co-authors. Guide for practical training in epidemiology Tashkent, "LITERATURE SPARKS". 2015		
6.	epidemiology Tashkent, "LITERATURE SPARKS". 2015		
6.	<ul> <li>epidemiology Tashkent, "LITERATURE SPARKS". 2015</li> <li>1. Military epidemiology:</li> <li>2. 2. Briko N.I., Pokrovsky V.I. Epidemiology. Textbook. M.: "GEOTAR-Media",</li> </ul>		
6.	<ul> <li>epidemiology Tashkent, "LITERATURE SPARKS". 2015</li> <li>1. Military epidemiology:</li> <li>2. 2. Briko N.I., Pokrovsky V.I. Epidemiology. Textbook. M.: "GEOTAR-Media", 2016.</li> <li>3. 3. Mirtazaev O.M., Zueva L.P., Matnazarova G.S. Epidemiology. Textbook.</li> </ul>		
6.	<ul> <li>epidemiology Tashkent, "LITERATURE SPARKS". 2015</li> <li>1. Military epidemiology:</li> <li>2. 2. Briko N.I., Pokrovsky V.I. Epidemiology. Textbook. M.: "GEOTAR-Media", 2016.</li> </ul>		
6.	<ol> <li>epidemiology Tashkent, "LITERATURE SPARKS". 2015</li> <li>Military epidemiology:</li> <li>2. Briko N.I., Pokrovsky V.I. Epidemiology. Textbook. M.: "GEOTAR-Media", 2016.</li> <li>3. Mirtazaev O.M., Zueva L.P., Matnazarova G.S. Epidemiology. Textbook. Tashkent, "LITERATURE SPARKS", 2016.</li> <li>4. Mirtazaev O.M., Zueva L.P., Matnazaqrova G.S. Epidemiology. Textbook. Tashkent, "Music" publishing house, "Renaissance Press" LLC publishing house,</li> </ol>		
6.	<ol> <li>epidemiology Tashkent, "LITERATURE SPARKS". 2015</li> <li>1. Military epidemiology:</li> <li>2. 2. Briko N.I., Pokrovsky V.I. Epidemiology. Textbook. M.: "GEOTAR-Media", 2016.</li> <li>3. 3. Mirtazaev O.M., Zueva L.P., Matnazarova G.S. Epidemiology. Textbook. Tashkent, "LITERATURE SPARKS", 2016.</li> <li>4. 4. Mirtazaev O.M., Zueva L.P., Matnazaqrova G.S. Epidemiology. Textbook. Tashkent, "Music" publishing house, "Renaissance Press" LLC publishing house, SPARKS OF LITERATURE, 2020.</li> <li>5. Mirtazaev O.M. Guide for practical training in epidemiology. Study guide.</li> </ol>		
6.	<ol> <li>epidemiology Tashkent, "LITERATURE SPARKS". 2015</li> <li>Military epidemiology:</li> <li>2. Briko N.I., Pokrovsky V.I. Epidemiology. Textbook. M.: "GEOTAR-Media", 2016.</li> <li>3. Mirtazaev O.M., Zueva L.P., Matnazarova G.S. Epidemiology. Textbook. Tashkent, "LITERATURE SPARKS", 2016.</li> <li>4. Mirtazaev O.M., Zueva L.P., Matnazaqrova G.S. Epidemiology. Textbook. Tashkent, "Music" publishing house, "Renaissance Press" LLC publishing house, SPARKS OF LITERATURE, 2020.</li> <li>5. Mirtazaev O.M. Guide for practical training in epidemiology. Study guide. Tashkent, 2015.</li> <li>6.</li> <li>7. Additional literature</li> </ol>		
6.	<ol> <li>epidemiology Tashkent, "LITERATURE SPARKS". 2015</li> <li>Military epidemiology:</li> <li>2. Briko N.I., Pokrovsky V.I. Epidemiology. Textbook. M.: "GEOTAR-Media", 2016.</li> <li>3. Mirtazaev O.M., Zueva L.P., Matnazarova G.S. Epidemiology. Textbook. Tashkent, "LITERATURE SPARKS", 2016.</li> <li>4. Mirtazaev O.M., Zueva L.P., Matnazaqrova G.S. Epidemiology. Textbook. Tashkent, "Music" publishing house, "Renaissance Press" LLC publishing house, SPARKS OF LITERATURE, 2020.</li> <li>5. Mirtazaev O.M. Guide for practical training in epidemiology. Study guide. Tashkent, 2015.</li> <li>6.</li> <li>7. Additional literature</li> <li>8. Epidemiology:</li> </ol>		
6.	<ol> <li>epidemiology Tashkent, "LITERATURE SPARKS". 2015</li> <li>Military epidemiology:</li> <li>2. Briko N.I., Pokrovsky V.I. Epidemiology. Textbook. M.: "GEOTAR-Media", 2016.</li> <li>3. Mirtazaev O.M., Zueva L.P., Matnazarova G.S. Epidemiology. Textbook. Tashkent, "LITERATURE SPARKS", 2016.</li> <li>4. Mirtazaev O.M., Zueva L.P., Matnazaqrova G.S. Epidemiology. Textbook. Tashkent, "Music" publishing house, "Renaissance Press" LLC publishing house, SPARKS OF LITERATURE, 2020.</li> <li>5. Mirtazaev O.M. Guide for practical training in epidemiology. Study guide. Tashkent, 2015.</li> <li>6.</li> <li>Additional literature</li> <li>Epidemiology:</li> <li>N.I. Briko, L.P. Zueva, V.I. Pokrovsky, V.P. Sergiev, V.V. Shkarin.</li> </ol>		
6.	<ol> <li>epidemiology Tashkent, "LITERATURE SPARKS". 2015</li> <li>Military epidemiology:</li> <li>2. Briko N.I., Pokrovsky V.I. Epidemiology. Textbook. M.: "GEOTAR-Media", 2016.</li> <li>3. Mirtazaev O.M., Zueva L.P., Matnazarova G.S. Epidemiology. Textbook. Tashkent, "LITERATURE SPARKS", 2016.</li> <li>4. Mirtazaev O.M., Zueva L.P., Matnazaqrova G.S. Epidemiology. Textbook. Tashkent, "Music" publishing house, "Renaissance Press" LLC publishing house, SPARKS OF LITERATURE, 2020.</li> <li>5. Mirtazaev O.M. Guide for practical training in epidemiology. Study guide. Tashkent, 2015.</li> <li>6.</li> <li>7. Additional literature</li> <li>8. Epidemiology:</li> </ol>		

coronavirus infection. Methodical guide. L.N. Tuychiev and co-authors. Tashkent, 2020.

- 11.3. N.I. Briko, G.G. Onishchenko, V.I. Pokrovsky. Management of infectious diseases. Moscow 2019. (el.ver)
- 12.4. A.V. Slobodenyuk, A.A. Kosova, R.N. An. Epidemiological analysis. Ekaterinburg "GBOU" 2015. (e.ver)
- 13.5. N.D. Yushchuk, Yu.V. Martynov, E.V. Kukhtevich, Yu.Yu. Grishina, S.A. Mikhneva. Epidemiology (Rukovodstvo dlya samopodgotovki k prakticheskim zanyatiyam) Moscow 2015.(el.ver)

## Military epidemiology:

1. Decision of the President of the Republic of Uzbekistan dated April 20, 2017, No. PQ-2909 "On measures to further develop the higher education system".

2. Decision of the President of the Republic of Uzbekistan dated May 5, 2017 No. PQ-2956 "On measures to further reform the medical education system".

3. Decree of the President of the Republic of Uzbekistan dated December 7, 2018 No. PF-5590 "On comprehensive measures to fundamentally improve the healthcare system of the Republic of Uzbekistan."

4. Decision of the President of the Republic of Uzbekistan dated May 6, 2019 No. PQ-4310 "On measures to further develop the system of medical and pharmaceutical education and science".

5. Decision of the President of the Republic of Uzbekistan dated April 7, 2020 No. PQ-4666 "On measures to introduce a completely new system of personnel training and continuous professional development in the medical and sanitary sector."

6. The President of the Republic of Uzbekistan dated July 25, 2020 No. PF-6035

"Mitigation of the coronavirus pandemic, sanitation of the population

"On measures to fundamentally improve the system of epidemiological stability and health care".

7. Leon Gordis Epidemiology, 5th edition, Philadelphia, USA 2014. **Websites:** 

1.<u>www.gov.uz</u> 2.<u>www.minzdrav.uz</u> 3.<u>www.tta.uz</u> 4.<u>www.tma.uz</u> 5.<u>httb://web.tma</u> 6.<u>TMA Wi-Fizone</u> 7.<u>www.ZiyONet</u> 8.<u>www.epidem.uz</u> 9.<u>www.epidem.uz</u> 10.www.lex.uz

	11. <u>www.MedPortal.ru</u>
	12. <u>www.Med-edu.ru</u>
	13. <u>www.med-info.ru</u>
	14. <u>www.medagent.ru</u>
	15. <u>www.medical-encyclopedia.zelenka.su</u>
	<u>16.www.journals.medi.ru</u>
	17. <u>https://www.iaea. org./</u> (International Atomic energ. Agen.)
	Developed and approved by the Tashkent Medical Academy.
7.	The curriculum of the module is approved by the order of the Tashkent Medical
/.	Academy dated " of 2023 (Annex of the order).
	F.K. Azizova, head of the educational and methodological department
	Responsibilities for the module:
	C.S. Matnaganana, TTA haad of the "Enidemiology" department dector of
	G.S. Matnazarova - TTA, head of the "Epidemiology" department, doctor of
8.	medical sciences.
	A.Yu. Mustanov - TTA, senior teacher of the department of epidemiology
	N.S. Saidkasimova is a senior teacher of the Department of Epidemiology of
	ΤΤΑ
	Reviewers:
	Internal reviewer:
	M.F. Abdukaharova - TTA, associate professor of the department of
	epidemiology, Ph.D.
9.	
	External reviewer:
	J.A. Rakhmonova - Center for professional development of medical
	personnel,
	Associate Professor of the "Epidemiology" Department, Ph.D.