

Thematic plan of practical classes in epidemiology for 3rd year FIS students

The thematic plan was approved at a meeting of the Department of Epidemiology and evidence-based medicine (minutes No 1. dated September 02, 2024)

№п/п	Topic and content of classes
1.	<p>Anti-epidemic measures and means. Ensuring epidemiological safety when providing medical care</p> <ol style="list-style-type: none"> 1. Definition of Epidemiology, subject, aims and tasks of Epidemiology as a science. 2. Structure and content of the epidemiological method of the research. 3. Review of the epidemic process: theory of the mechanism of infectious agents transmission; theory of self-regulation of the epidemic process. 4. Signs of the epidemic process on a qualitative and quantitative basis: sporadic morbidity, epidemic, pandemic, breakout, endemic and exotic morbidity. Morbidity intensity, dynamics, structure and spatial characteristics. 5. Anti-epidemic measures and means. Main and additional groups of anti-epidemic measures. 6. Criteria for the selection of anti-epidemic measures. Quality and efficiency of anti-epidemic measures. 7. Arrangement of anti-epidemic control for the population. 8. Disinfection, methods and means, indications for assigning. <ol style="list-style-type: none"> 8.1. Disinsection. 8.2. Pest control. 9. Sterilization, methods, indications, quality control.
2	<p>Basics of immunoprophylaxis of infectious diseases</p> <ol style="list-style-type: none"> 1. Definitions of “immunity”, immune response of an organism, “primary and secondary immune response”. 2. Classification and characterization of immunobiological drugs used in vaccination. Vaccine administration. Infection control. 3. Vaccine storage and the “Cold chain”.
3	<p>Organizational and methodological issues of immunoprophylaxis infectious diseases</p> <ol style="list-style-type: none"> 1. Adverse events following immunization (AEFI): causality assessment. 2. Medical contraindications to vaccinations
4	<p>Immunoprophylaxis of infectious diseases included in National immunisation schedule</p> <ol style="list-style-type: none"> 1. National Immunisation Schedule of the Republic of Belarus. 2. Tactics for preventive vaccination against hepatitis B. 3. Tactics for preventive vaccination against tuberculosis. 4. Tactics for preventive vaccination against poliomyelitis. 5. Tactics for preventive vaccination against diphtheria, tetanus and pertussis. 6. Tactics for preventive vaccination against measles, mumps and rubella. 7. Tactics for preventive vaccination against haemophilus influenza type b. 8. Tactics for preventive vaccinations against pneumococcal infection. 9. Tactics for preventive vaccinations against influenza/flu.
5	<p>Preventive immunisation against infectious diseases according to the epidemic indications</p> <ol style="list-style-type: none"> 1. Vaccination on epidemic indications. <ol style="list-style-type: none"> 1.1. Hepatitis A vaccinations. 1.2. Chickenpox vaccinations. 1.3. Yellow fever vaccinations. 1.4. Rabies vaccinations. 2. The tactics for preventive vaccinations not included in the National Immunisation Schedule of preventive vaccinations. <ol style="list-style-type: none"> 2.1. Vaccination against papillomavirus infection.

	<p>2.2. Vaccination against rotavirus infection.</p> <p>3. Emergency tetanus prophylaxis.</p>
6	<p>Intestinal infections: the epidemic process, the basics of anti-epidemic and preventive measures</p> <ol style="list-style-type: none"> 1. Factors, the mechanism of development and signs of the epidemic process in intestinal infections. 2. Shigellosis, the mechanism of development and signs of the epidemic process. 3. Salmonellosis, the mechanism of development and signs of the epidemic process, its prevention. 4. Rotavirus infection, the mechanism of development and signs of the epidemic process. 5. Hepatitis A, the mechanism of development of the epidemic process and anti-epidemic measures. Hepatitis E. 6. Arrangement of anti-epidemic measures in the foci of acute intestinal infections. 7. Arrangement of epidemiological surveillance for the acute intestinal infections.
7	<p>Aerosol and herpes virus infections: the epidemic process, the basics of anti-epidemic and preventive measures</p> <ol style="list-style-type: none"> 1. Factors, the mechanism of the development and signs of the epidemic process of aerosol infections. 2. Meningococcal infection: the characteristics of the pathogen, the mechanism of the development and signs of the epidemic process, prevention and anti-epidemic measures. 3. Streptococcal infection (scarlet fever): the characteristics of the pathogen, the mechanism of the development and signs of the epidemic process, prevention and anti-epidemic measures. 4. Influenza: characteristics of the pathogen, the mechanism of the development and signs of the epidemic process, prevention and anti-epidemic measures. 5. New coronavirus infection: the characteristics of the pathogen, the mechanism of the development and signs of the epidemic process, prevention and anti-epidemic measures.
8	<p>Infections with a predominantly parenteral infection mechanism: the epidemic process, the basics of anti-epidemic and preventive measures</p> <ol style="list-style-type: none"> 1. Factors, mechanism of the development and signs of the HIV/AIDS epidemic process. 2. Principles of arranging anti-epidemic support of HIV infection. 3. Anti-epidemic measures in detecting a case of HIV infection. 4. The main directions of work on the problem of HIV/AIDS centers for hygiene and epidemiology. 5. Hepatitis B, C, D and others: characteristics of pathogens, mechanism of development of the epidemic process, signs of the epidemic process, prevention and anti-epidemic measures
9	<p>Infections with a vector-borne mechanism of transmission</p> <ol style="list-style-type: none"> 1. Vector-borne diseases, general characteristics 2. Tick-borne encephalitis: characteristics of the pathogen; mechanism of development of the epidemic process; manifestations of epizootic and epidemic processes; prevention; sanitary and anti-epidemic measures. 3. Lyme disease: characteristics of the pathogen; mechanism of development of the epidemic process; manifestations of epizootic and epidemic processes; prevention; sanitary and anti-epidemic measures