

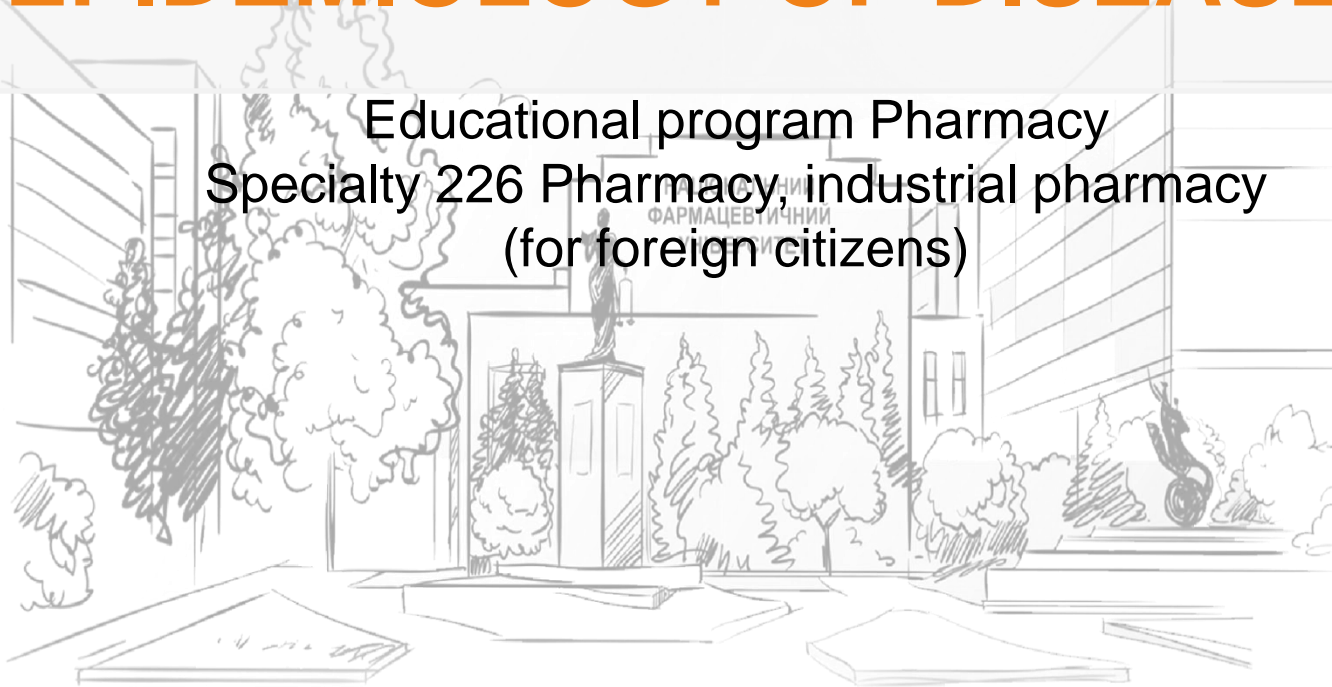


MINISTRY OF HEALTH OF UKRAINE  
NATIONAL UNIVERSITY OF PHARMACY

Department of microbiology, virology and immunology

# EPIDEMIOLOGY OF DISEASES

Educational program Pharmacy  
Specialty 226 Pharmacy, industrial pharmacy  
(for foreign citizens)

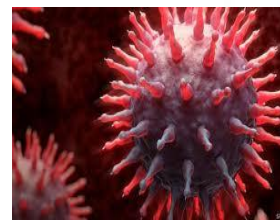


# EPIDEMIOLOGY



- Epidemiology emerged at the dawn of medicine as the science of epidemics. The term "epidemic" (from the Greek Epi - on, in and demos - people) determined the growth or appearance of a large number of diseases that had not previously been encountered in this territory.
- For centuries, massive "general" diseases, plagues, epidemics have accompanied mankind, taking a huge number of lives.

- **Epidemiology**- a science that studies the causes, conditions and mechanisms of mass morbidity of the population, and ways to prevent it.



- In the past three decades, more than 40 previously unknown, newly identified (emerging) infectious diseases have been identified, many of which pose a high epidemiological danger, are characterized by a severe course and high mortality (legionnaires' disease; HIV infection, viral hepatitis C, D, E, diseases of the nervous system). systems caused by prions, an outbreak of coronavirus infection, etc.).



# The goal of modern epidemiology of infectious and somatic diseases

- study of the mechanism of occurrence and development of the epidemic process,
- development and application of methods for the prevention and control of these diseases.



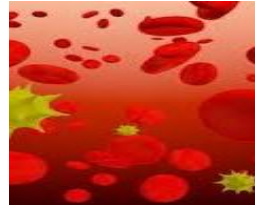
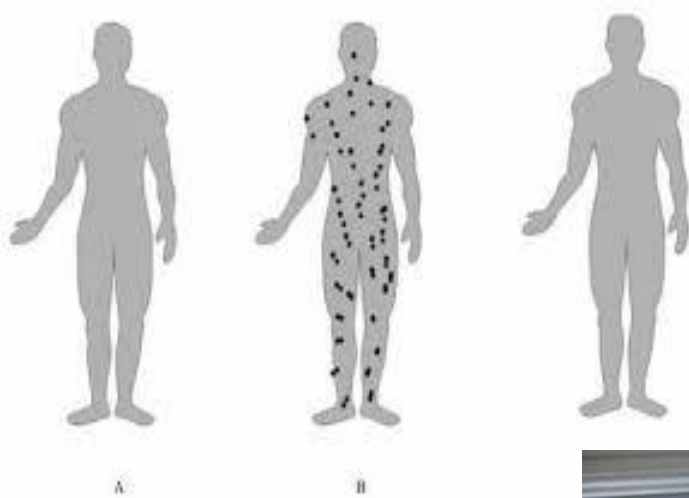
**Subject of epidemiology**- epidemic process, methods of combating and preventing infectious and somatic diseases.

## Tasks of disease epidemiology:

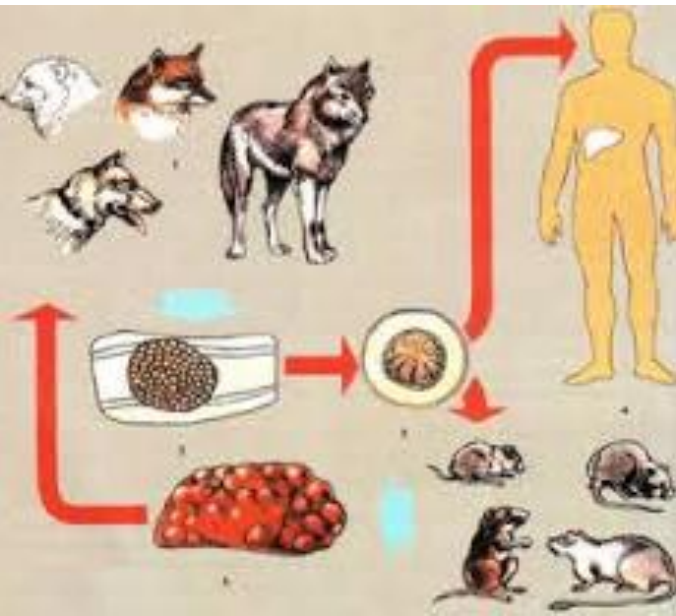


- Determination of the medical and socio-economic significance of the disease and its places in the structure of the pathology of the population;
- Studying the patterns of the spread of the disease in time (by years, months, etc.), across the territory and among various (age, gender, professional, household, ethnic, etc.) population groups;
- Identification of causal relationships of morbidity;
- Development of recommendations for optimizing the prevention and control of this disease.

# When studying the subject "Epidemiology of diseases" Students will learn:



- Leading factors and patterns of formation of the epidemic process
- The structure of the epidemic process, sources and methods of transmission of infectious agents, Legislative documents regulating anti-epidemic work



# When studying the subject "Epidemiology of diseases" students will learn:



- Regime-restrictive measures in identifying the source of infection
- Organization of anti-epidemic work in the foci of infections, providing the population with effective immunobiological preparations

# Anti-epidemic methods



**Disinfection**  
**Sterilization**  
**Disinsection**  
**Deratization**





# Students will learn: Fundamentals of specific prevention of infectious diseases



New principles for creating vaccines



Vaccine transportation and storage basics

- Immunological mechanisms of action of vaccines
- Evaluation of the effectiveness of immunoprophylaxis



Side effects of vaccines

- Vaccine Quality Criteria
- Vaccine safety
- State Vaccine Safety Assessment System
- Oversight quality vaccines

# Students will learn:

Fundamentals of specific prevention of infectious diseases

- Sanitary protection of state borders from the importation of infectious diseases
- International System for the Prevention of Importation of Infectious Diseases
- Concept of international health regulations
- Special requirements for the preliminary importation of especially dangerous infectious diseases



НФaУ



# THANK YOU FOR YOUR ATTENTION!



Choose a discipline  
**«Epidemiology of diseases»**

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