**RESOLUTION**

**V International Conference on Combating Infectious Diseases**

**12-13 December, 2024                                St Petersburg**

V International Conference on Combating Infectious Diseases (Conference, hereinafter), organized by the Federal Service for Surveillance on Consumer Rights Protection and Human Well-Being, has gathered more than 330 delegates from 26 countries of the world who represent state and governmental bodies, academic communities, epidemiologists, virologists, bacteriologists, immunologists, biologists, physicians, IT specialists, etc. Delegations from CIS countries, Eastern Europe, Central and South-East Asia, Africa and South America took part in the Conference, as well as representatives of international organisations.

Кey areas in improving the combat against infectious diseases are the development of genomic and epidemiological surveillance, introduction of IT technologies for processing big data, math modelling, forecasting the development of the epidemic process, as well as increasing the mobility of the system for detection of epidemic emergencies and response to them.

In the course of 2 plenary sessions, 10 breakout sessions and 1 round table, 104 presentations have been considered. Recent achievements in the fields of synthetic biology, genomic and information technologies, artificial intelligence and big data technology have been presented by the specialists of various disciplines, with special attention paid to the use of these tools in the epidemiological surveillance.

The delegates shared their experience in combating new and re-emerging infectious threats, told about successes and challenges in counteracting natural-focal, vaccines-manageable and respiratory infections, viral hepatites, HIV, and AMR (antimicrobial resistance). The results of international collaboration in these spheres both at the regional, and global scales have been presented.

Conference delegates:

1. Stated that proactive epidemiological surveillance is based on the technological triad underpinned by digitalization, modern achievements in the area of genomic and postgenomic technologies, and mobile solutions.
2. Highlighted the success in the development of synthetic biology techniques, but also stated how important it is to give a comprehensive ethical evaluation of probable consequences of their implementation in various aspects of life, including medicine.
3. Underlined the necessity to engage information technologies, math models and machine learning techniques in solving the tasks of epidemiological surveillance, in particular epidemiological analysis, degree forecast, dynamics, geographical prevalence and demographic structure of the infectious diseases, as well as evaluate the effectiveness of anti-epidemic measures.
4. Stated that the genomic epidemiological surveillance secures a deeper understanding of the nature, and evolution of the infectious pathogens, as well as circulation routes, and allows to identify the risks of unfavourable course of the epidemiological situation and new infectious threats in a timely manner.
5. Confirmed the importance of epidemiological surveillance when forecasting the epidemic situation and controlling the effectiveness of specific prophylaxis programmes; and brought to the attention of other delegates new methodological approaches to mass immunological studies; pointed out how the inherent immunity specifics impact the formation of immune response to infection and vaccination.
6. Pointed out that implementation of modern mobile solutions into the epidemiological surveillance allows to carry out operational work directly in the foci of the infectious diseases, and at the same time significantly increase the volume of lab diagnostics in the conditions of securing biosecurity.
7. Focused on the topicality of antimicrobial resistance (AMR), with special accent on its global nature; and shared the methods and techniques they use in their countries to counteract it.
8. Underlined once again how important it is to implement the academic research and developments into the practice of epidemiological surveillance, and stressed out that all countries have to join efforts to combat the infectious diseases.
9. Stated how important it is to build partnerships on the basis of the principles of equality and mutuality, in order to assist and promote the effective epidemiological surveillance and for the countries to develop their own potential to combat the infections.
10. Stressed that the V Conference, the same as before, provided the delegates an opportunity to have an open and sincere dialogue, аs well as exchange experience with the aim to better protect lives and health of the populations of their countries.