

SMS RO-UA ROUA00136

DEVELOPMENT OF SCREENING AND MONITORING SYSTEMS FOR
EMERGING DISEASES AND PREVENTION OF CROSS-BORDER
EPIDEMICS IN THE CURRENT CONTEXT



Newsletter 9 - Successful Completion of the First and Second Sampling and Analysis Campaigns in Ukraine

The first and second sampling and analysis campaigns under the SMS-RO-UA project in Ukraine have been completed. The field activities, carried out by an external expert organisation, included the collection of biological, water, and soil samples in accordance with the approved Terms of Reference (ToR). The work covered five settlements in the southern part of Odesa region.

The two campaigns resulted in the collection of a substantial amount of material for further laboratory investigation. **More than 400 samples were collected during the first campaign, followed by more than 600 additional samples during the second campaign**, covering different animal species as well as various environmental objects. In total, more than **1,000 samples** were collected during the two campaigns, providing material for the assessment of both animal health and environmental factors.

An important feature of the research was its comprehensive approach to assessing the situation. Alongside the collection of biological material, water and soil samples were also examined. This makes it possible to consider potential infectious disease risks not only from the perspective of animal health, but also in relation to environmental conditions and their possible implications for human health.

Throughout the research activities, the external expert responsible for study coordination provided scientific and methodological support, including assessment of the epizootic situation in the cross-border region and evaluation of laboratory analysis results. The OSAU project team monitored the implementation of the planned activities, provided the necessary equipment and support, and ensured compliance with the approved Terms of Reference.

Proper handling of the collected material was another important part of the campaigns. All samples were collected in accordance with established procedures, properly labelled, packaged, and transported to the external expert organisation for laboratory investigation in a high-biosecurity laboratory.

Comprehensive Laboratory Analysis

The laboratory investigations combined several complementary methods. Modern molecular genetic techniques, including **real-time PCR and conventional PCR, were used for pathogen detection, together with serological testing using ELISA.**

The combination of different methods provides a more comprehensive basis for assessing the presence of potentially dangerous pathogens. All laboratory procedures were carried out in accordance with Biosafety Level 2 (BSL-2) requirements and internationally recognised quality standards.

The data obtained through the research are relevant not only for assessing the current epizootic situation. They can also contribute to a better understanding of the factors that may influence the occurrence and spread of infectious diseases in the Ukraine–Romania cross-border region.



From Local Research to the One Health Approach

One of the important aspects of the project is the application of the **One Health** approach, which recognises the close relationship between the health of people, animals, and the environment.

For this reason, the research covered not only different animal species but also environmental objects. Such an approach allows potential risks to be considered more comprehensively and helps identify possible links between animal health, environmental factors, and human health.

The data obtained in Ukraine will contribute to:

- a comprehensive assessment of epizootic risks in the cross-border region;
- the preparation of recommendations for preventing dangerous transboundary infectious diseases;
- improving approaches to identifying sources of disease and preventing their spread;
- planning joint preventive and disease-control measures;
- the further practical application of the One Health approach.

The implementation of the two campaigns represents an important part of the practical implementation of the SMS-RO-UA project and has generated a substantial body of data from the selected areas of Odesa region. Combining field sampling, laboratory diagnostics, and assessment of the epizootic situation makes it possible to consider the findings in the broader context of animal health, environmental conditions, and human health in the cross-border region.

The laboratory results, together with the step-by-step protocols and instructions for identifying sources of disease and preventing their spread, will subsequently be presented to the public as part of the project's information, communication, and dissemination activities. This will provide stakeholders with access to the results obtained and support the further use of the developed materials in joint preventive activities.

Overall, the research combines fieldwork, laboratory diagnostics, and risk assessment within an integrated approach in which the health of animals, people, and the environment is considered as interconnected. This is at the core of the One Health approach and is particularly relevant for cross-border areas, where the movement of people and animals, together with environmental factors, can create shared challenges for health and safety.

PARTNER DETAILS



Youth Public Organization "New European Generation"

Address: 26 Flotska Street, Izmail, Odesa Region, Ukraine, 68600

[Website](#)

The Interreg VI-A NEXT Romania-Ukraine Programme 2021- 2027 is financed by the European Union and co-financed by the participating countries in the Programme.

This publication has been produced with the assistance of the European Union. The contents of this publication are the sole responsibility of Youth Public Organization "New European Generation" and can in no way be taken to reflect the views of the European Union or of the Interreg VI-A NEXT Romania-Ukraine Programme 2021-2027 management structures.

Programme's website: www.ro-ua.net