

Bianca Georgiana Enciu

The European Programme for Intervention Epidemiology Training (EPIET), Cohort 2023
**National Center for Communicable Surveillance and Control,
Romania**

Background

The ECDC Fellowship Programme is a two-year competency-based training with two paths: the field epidemiology path (EPIET) and the public health microbiology path (EUPHEM). After the two-year training, EPIET and EUPHEM graduates are considered experts in applying epidemiological or microbiological methods to provide evidence to guide public health interventions for communicable disease prevention and control. The Administrative Decisions ECDC/AD/2022/16 Rev.01 and ECDC/AD/2023/06 govern the European Union (EU)-track and Member State (MS)-track, respectively, of the ECDC Fellowship Programme, field epidemiology path (EPIET) and public health microbiology path (EUPHEM), Cohort 2023.

Both curriculum paths provide training and practical experience using the 'learning-by-doing' approach at acknowledged training sites across the European Union/European Economic Area (EU/EEA). This final report describes the experiences and competencies the fellow acquired by working on various projects, activities, theoretical fellowship training modules, other modules or trainings, and international assignments or exchanges during the fellowship.

Pre-fellowship short biography

Bianca Georgiana Enciu has worked at the National Institute of Public Health, National Center for Communicable Diseases Surveillance and Control (NCCDSC) in Bucharest, Romania since 2018. Since 2019, Bianca has also worked as an assistant professor in the Department of Epidemiology at the Carol Davila University of Medicine and Pharmacy in Bucharest. She graduated as a medical doctor in 2017 from the University of Medicine and Pharmacy of Craiova and has specialised in epidemiology since 2018. In September 2023, she started her EPIET fellowship as an MS-track fellow, combining the fellowship with her regular duties.

Results

The objectives of the core competency domains were achieved partly through project and activity work, and partly by participating in the training modules. Results are presented in accordance with the EPIET/EUPHEM core competencies, as set out in the ECDC Fellowship Manual¹.

¹ European Centre for Disease Prevention and Control (ECDC). Manual for the ECDC Fellowship Programme EPIET and EUPHEM paths. Stockholm: ECDC; 2025. Available at: <https://www.ecdc.europa.eu/en/publications-data/ecdc-fellowship-programme-manual>

1. Epidemiological investigations

1.1. Outbreak investigations

1.1.1. Outbreak of gastrointestinal illness among students in a closed-admission-system university in Bucharest, Romania, November 2023

Supervisor: Alina Zaharia (National Institute of Public Health, NCCDSC)

Category: Food- and waterborne diseases

Aim: To investigate an outbreak of gastrointestinal illness among students in a closed-admission-system university.

Methods: The standard steps of an outbreak investigation were followed. A retrospective cohort study was conducted, with case and non-case data collected through an electronic questionnaire. Descriptive, univariate, stratified, and multivariable analyses were subsequently carried out.

Results: Out of 505 students, 238 (47%) reported gastrointestinal symptoms within 72 hours after consuming one of the meals served at the students' canteen on 14 November (attack rate = 47%). Most cases were male (n=155; 65%), aged 20 to 24 years (n=200; 84%). Students who were exposed to lunch had a relative risk (RR) of 2.4 (95% confidence interval (CI): 1.2–4.8) to become a case, while the location, Dining Room 4, had a relative risk of 2.2 (95% CI: 1.9–2.7). Food items associated with becoming a case were grilled pork (RR: 2.0; 95% CI: 1.2–3.3), traditional potatoes (RR: 1.8; 95% CI: 1.2–2.6), cabbage salad (RR: 1.6; 95% CI: 1.2–2.3) and pork soup (RR: 1.5; 95% CI: 1.1–1.9).

Public health implications/Conclusions: This point-source outbreak was presumed to be a toxigenic food-borne outbreak, most likely caused by coagulase-positive *Staphylococcus*. To prevent the occurrence of similar outbreaks in the future, a set of specific measures were recommended, including the regular training of canteen staff on hygiene measures during food preparation and distribution, periodical observational verification of their compliance to these measures, and screening of their carrier status.

Role: During the outbreak investigation, the fellow closely collaborated with other institutions, developed the case definition, designed the electronic questionnaire for the retrospective cohort study (the data collection started on 18 November), and recommended control measures throughout the outbreak investigation. She prepared the analysis plan, performed descriptive, univariate, stratified, and multivariable analyses in RStudio, and wrote the outbreak report. Additionally, she summarised the report in Romanian, highlighting the main results for key stakeholders.

1.1.2. Outbreak of food-borne botulism with eight paediatric cases in Timiș County, Romania, January 2024

Supervisor: Alina Zaharia (National Institute of Public Health, NCCDSC)

Category: Food- and waterborne diseases

Aim: To investigate an outbreak of food-borne botulism which occurred among the members of a family with three adults and 10 foster children.

Methods: Clinical and laboratory data about the cases, defined according to an adapted EU case definition, were collected from the reporting and medical sheets, as well as from the laboratory bulletins. Data on exposure were collected by conducting interviews with caregivers and by testing available food items; these were noted in the caregivers' interview summary report and laboratory bulletins.

Results: The outbreak occurred in a 13-member household, with 10 foster children and three adults. Only eight children met the case definition for botulism (six males and two females, 3–8 years old). They were hospitalised for 8–21 days, presenting symptoms like mydriasis (n=7; 88%), dry mouth (n=7; 88%), constipation (n=5; 63%), dysphagia (n=5; 63%) and ptosis (n=3; 38%). All of them received anti-ABE botulinum antitoxin within 24 hours of diagnosis, and completely recovered. In all the serum samples tested, *Clostridium botulinum* toxin was identified. Only two were tested for identifying the type of toxin (type B was found). No botulism toxin could be detected in the tested food items.

Public health implications/Conclusions: Food-borne botulism should be included in the differential diagnosis of children presenting acute neurological symptoms, especially in high-incidence countries like Romania. Increasing efforts should be made to enhance surveillance and raise awareness on basic food hygiene rules among families and caregivers, including recommendations before the festive season.

Role: During the outbreak investigation, the fellow closely collaborated with other institutions to collect case data, conducted a descriptive analysis by time, place, and person, and recommended control measures. She also engaged in communication activities related to the investigation results (see section 4.1, 'Manuscripts at advanced stages', section 4.3. 'Conference presentations', presentation 4).

1.2. Surveillance

1.2.1. Setting up a passive surveillance system for diphtheria in Romania, 2024

Supervisor: Alina Zaharia (National Institute of Public Health, NCCDSC)

Type of project: Setting up a surveillance system

Aim: To implement a specific surveillance system for diphtheria.

Methods: In response to the evolving diphtheria situation across Europe and the emergence of non-toxigenic diphtheria cases among people who inject drugs (PWID) since November 2022, a passive surveillance system for diphtheria was implemented in early 2024, covering the entire population of Romania. The case definition applied aligns with the 2018 EU case definition.

Results: From January 2024 to 15 July 2025, 10 suspected diphtheria cases were reported: six as respiratory diphtheria (ages: 22–67 years; male-to-female ratio: 1:1) and four as cutaneous diphtheria (ages: 38–41 years; male-to-female ratio: 4:0). All cases were laboratory investigated and the diphtheria diagnosis was subsequently discarded. Naso-pharyngeal swabs from all respiratory cases were negative for *Corynebacterium* species. For cutaneous diphtheria, the laboratory investigation revealed the presence of non-toxigenic *Corynebacterium diphtheriae* strains. The genomic analysis highlighted the presence of sequence type 5 (ST5), an autochthonous strain which was previously identified. None of the cases had a long-term protective titer of antibodies.

Public health implications/Conclusions: The implementation of this specific surveillance system enables early identification of possible outbreaks, supports timely public health responses, and provides critical data to inform public health interventions.

Role: The fellow designed a national diphtheria surveillance system, based on a newly developed methodological framework available on the website of the National Institute of Public Health: <https://insp.gov.ro/centrul-national-de-supraveghere-si-control-al-bolilor-transmisibile-cnscbt/metodologii/>. She collaborated with other institutions, such as the National Institute for Medical-Military Research and Development Cantacuzino, regarding the laboratory protocol and consulted epidemiologists from local public health authorities on data collection. At present, she coordinates the national surveillance for diphtheria, managing suspected cases, investigations and communication with stakeholders. Her analysis contributed to the 2024 annual disease report: <https://insp.gov.ro/centrul-national-de-supraveghere-si-control-al-bolilor-transmisibile-cnscbt/rapoarte-anuale/>. Additionally, she delivered an oral presentation on diphtheria to raise vaccination awareness at a national conference (see section 4.3, 'Conference presentations', presentation 2), as well as developed a proposal for the surveillance system and a short activity report with the main surveillance results.

1.2.2. Epidemiology of malaria in Romania in 2025 and its evolution from 2010 to 2024

Supervisor: Alina Zaharia (National Institute of Public Health, NCCDSC)

Type of project: Epidemiological trends of malaria in Romania

Aim: To describe the epidemiology of malaria in Romania in 2025 and its evolution from 2010 to 2024, using national surveillance data.

Methods: A retrospective analysis of the malaria surveillance data collected from 2010 to 2025 was carried out, using RStudio. Variables included in the analysis were age, sex, date of disease onset, date of notification, importation status, vital status, county of notification, visited country, and *Plasmodium* species detected.

Results: A total of 438 malaria cases and 10 deaths were reported in Romania during the study period, resulting in a mean notification rate of 0.13 cases per 100 000 population and an overall case fatality ratio of 2.3%. Almost all notified cases were imported, except one healthcare-associated case through iatrogenic transmission. Travels to Equatorial Guinea and Nigeria were associated with the occurrence of the highest number of malaria cases: 64 (15%) and 50 (11%), respectively. The highest notification rate (0.33 cases per 100 000 population) was recorded in 2025 and the lowest in 2020 (0.01 cases per 100 000 population). *Plasmodium falciparum* accounted for 76% of notified cases (n=333) in Romania during the study period, followed by *Plasmodium vivax* (45 cases; 10%) and *Plasmodium ovale* (27 cases; 6%). Most cases were male (n=395; 90%) with a median age of 38 years (interquartile range (IQR): 30–48; range: 7–68). Over one-third of the cases (n=153, 35%) were notified by Bucharest County, with a median notification rate of 0.42 per 100 000 population (IQR: 0.19–0.69, range: 0.00–1.28). This was followed by 55 cases (13%) residing in Constanța County, with a median notification rate of 0.33 per 100 000 population (IQR: 0.13–0.62, range: 0.00–1.81).

Public health implications/Conclusions: The assessment of malaria trends over time will support the implementation of appropriately tailored public health interventions, including strengthened surveillance, vector control, targeted communication initiatives on the importance of pre-travel advice, and collaboration between different medical specialties and ministries.

Role: For this surveillance project, the fellow analysed the surveillance data and drafted a report.

Routine surveillance activities

National surveillance and case investigations of malaria in Romania, 2023–2025

Activities and role: The fellow has been coordinating the national surveillance for malaria in Romania since May 2022, managing suspected cases defined in accordance with the EU case definition, investigations and communication with the stakeholders. She also analysed data for the annual transmissible diseases report (<https://insp.gov.ro/centrul-national-de-supraveghere-si-control-al-bolilor-transmisibile-cnsct/rapoarte-anuale/>) (see section 4.2 'Other reports', report 4, and produced communication materials). She responded to an upsurge of malaria cases among travellers who most likely acquired the disease in Zanzibar and presented in Romania and Denmark (December 2023–January 2024) by preparing official notifications and travel recommendations.

In early 2024, she updated the methodological framework for malaria surveillance in accordance with legal changes (<https://insp.gov.ro/centrul-national-de-supraveghere-si-control-al-bolilor-transmisibile-cnsct/metodologii/>) and prepared a short description of the surveillance results over a two-year period for uploading to the ECDC Learning Portal for infectious diseases.

The fellow coordinated the investigation of a healthcare-associated *Plasmodium vivax* case in Romania, reminding that strict biosafety measures are needed in healthcare settings to prevent malaria transmission. She prepared notifications for the European surveillance portal for infectious diseases (EpiPulse) with regard to this case, and prepared a presentation which was delivered by the representative for Romania at the ECDC Roundtable meeting on 31 July 2025. Moreover, the fellow prepared a short summary report with the results of the investigation for the Romanian Ministry of Health.

National surveillance of tetanus in Romania, 2023–2025

Activities and role: The fellow has been coordinating the national surveillance for tetanus since May 2022, managing suspected cases, investigations and communication with the stakeholders. She analysed data for the annual transmissible diseases report (<https://insp.gov.ro/centrul-national-de-supraveghere-si-control-al-bolilor-transmisibile-cnsct/rapoarte-anuale/>) (see section 4.2, 'Other reports', report 5). In early 2024, she updated the methodological framework for tetanus surveillance in accordance with legal changes (<https://insp.gov.ro/centrul-national-de-supraveghere-si-control-al-bolilor-transmisibile-cnsct/metodologii/>) and prepared a short description of the surveillance results over a two-year period for uploading to the ECDC Learning Portal for infectious diseases.

2. Applied public health research

2.1. First national evaluation of the implementation of Infection Prevention and Control (IPC) core components in Romanian public hospitals using the World Health Organization Infection Prevention and Control Assessment Framework (IPCAF), Romania, 2025

Supervisors: Alina Zaharia (National Institute of Public Health, NCCDSC), Andreea Niculcea (National Institute of Public Health, NCCDSC)

Aim: To evaluate, for the first time, the extent to which the eight IPC core components (CC), as defined by the World Health Organization (WHO), have been implemented in Romanian public hospitals.

Methods: 369 public hospitals were invited to complete between 4 February and 3 March 2025, a translated and adapted online version of the IPCAF tool. The IPCAF questionnaire assigns scores to responses, resulting in an overall score that classifies facilities into four IPC categories: 0–200 points: inadequate, 201–400 points: basic, 401–600 points: intermediate, 601–800 points: advanced.

Results: 249 public hospitals filled in the questionnaire (68% response rate), with a median overall score of 635 (IQR: 578–680). Out of those, 165 (66%) hospitals were classified as advanced, 82 (33%) as intermediate, and two (1%) as basic. The lowest scores were recorded for CC7, 'Workload, staffing, and bed occupancy' (median: 65; mean: 64), CC5 'Multimodal strategies for implementation of IPC interventions' (median: 75; mean: 67), and CC3, 'IPC education and training' (median: 75; mean: 75). By contrast, CC2, 'IPC guidelines' had the highest median (98) and mean (92) scores.

Public health implications/Conclusions: This initial evaluation revealed that IPC structures and processes have been satisfactorily implemented in two-thirds of participating hospitals in Romania, particularly in areas related to IPC guidelines. However, there is a clear potential for improvement, especially in ensuring optimal staffing levels, strengthening the implementation of multimodal strategies, and delivering comprehensive training. Repeated implementation of this study may help identify trends and developments over time, while lessons learnt could inform future actions aimed at strengthening IPC systems.

Role: Starting from July 2024, the fellow adapted and translated the IPCAF tool, prepared ethical clearance documents, developed the electronic data collection form, and coordinated a pilot, integrating the feedback. She prepared training materials, conducted training for public health authorities (PHAs) (see section 4.4, 'Other presentations', presentation 1), and created a recorded presentation for hospitals (see section 4.4, 'Other presentations', presentation 2). The fellow set up a project email, automated score and reminder emails, and handled inquiries. Collaborating closely with PHAs, she provided guidance during data collection. She also prepared the project proposal, research protocol, and analysis plan, performing descriptive and comparative analyses in RStudio and Excel. The research report was written and uploaded to the ECDC Learning Portal for infectious diseases, with a Romanian version designed for the Ministry of Health and PHA, available on the National Institute of Public Health website (<https://insp.gov.ro/centrul-national-de-supraveghere-si-control-al-bolilor-transmisibile-cnscbt/analiza-date-supraveghere/>) (see section 4.2, 'Other reports', report 1). Following the study findings and recommendations, the fellow contributed to securing additional funding to conduct training activities on IPC for healthcare professionals and update the legal framework governing surveillance and control of healthcare-associated infections, including the responsibility of conducting regular IPC evaluations. Additionally, the fellow presented the main study results at the European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE) 2025, at a parallel session (see section 4.3, 'Conference presentations', presentation 1).

2.2. Assessment of the impact of vaccination policies on the uptake of human papillomavirus (HPV) vaccination in Romania, 2020–2024

Supervisor: Alina Zaharia (National Institute of Public Health, NCCDSC)

Aim: To assess the impact of vaccination policies on the uptake of the HPV vaccine in Romania.

Methods: A descriptive and comparative analysis was conducted using the HPV data available in the reports generated from the National Electronic Registry of Vaccinations (NERV) for all persons who started their HPV vaccination schedule between 1 January 2020 to 31 December 2024. A Poisson regression model was created to assess the impact of reimbursement policies at county level. Vaccination coverage by birth cohort for the females targeted by the National Vaccination Programme was calculated using the number of females born from 2003 to 2013, obtained from the National Institute of Statistics.

Results: 224 260 persons received at least one dose of HPV vaccine, mean age 17.5 years (standard deviation (stdev): ± 8 years), mostly female (202 449; 90%). The highest number of persons ($n=112\ 034$; 50%) who started their vaccination schedule belong to the age group, 11–14 years. The number of people starting their vaccination schedule in 2024 was 90 445 (40%). After the implementation of the reimbursement policies, an increase in the mean age of the persons starting HPV vaccination was recorded (22 years; stdev: ± 10 years vs 14 years; stdev: ± 3 years) in the number of males starting vaccination (21 052 vs 759; $p<0.001$). The Poisson regression model highlighted 15 counties recording higher number of persons who started HPV vaccination than predicted. The average vaccination coverage was 12.5% (stdev: ± 8.67 ; 95% CI: 11.8–13.3).

Public health implications/Conclusions: HPV vaccination strategies implemented in Romania have been proven to be efficient in increasing the vaccination uptake among the eligible groups. However, the vaccination coverages are suboptimal, with disparities among counties and age groups, highlighting the need to combine the strategies aiming to increase the access to vaccines with other targeted interventions.

Role: Since May 2022, the fellow has been involved in HPV vaccination monitoring, including collating paper-based data from public health authorities (PHAs), validating data in the NERV system in collaboration with PHAs, and communicating findings (see section 4.3, 'Conference presentations', presentation 3) and conducting training activities. For the research project, she worked closely with PHAs for data validation and obtained population denominators from the National Institute of Statistics to estimate coverage. She prepared a project proposal, drafted an analysis plan, and conducted analyses in RStudio. The research report was written and uploaded to the ECDC Learning Portal for infectious diseases, with a Romanian version designed for the Ministry of Health and PHAs, available on the website of the National Institute of Public Health (<https://insp.gov.ro/centrul-national-de-supraveghere-si-control-al-bolilor-transmisibile-cnscbt/analiza-date-supraveghere/>) (see section 4.2 'Other reports', report 2). Additionally, she authored a report on HPV vaccination trends following reimbursement policies, shared with the Ministry of Health and available online on the website of the National Institute of Public Health (<https://insp.gov.ro/centrul-national-de-supraveghere-si-control-al-bolilor-transmisibile-cnscbt/analiza-date-supraveghere/>) (see section 4.2 'Other reports', report 3).

3. Teaching and pedagogy

Surveillance – short lecture and exercises, National Institute of Public Health, Bucharest, Romania, June 2024

This face-to-face teaching activity was delivered on 20 and 27 June 2024 to 11 junior physicians at the National Institute of Public Health, Bucharest, Romania. The first session included a lecture prepared by the fellow and a group exercise consisting of describing three Romanian surveillance systems, followed by working group presentations and discussions. As homework, participants had to reflect on the need for implementing specific surveillance systems for certain diseases. The second session started with a short recap, followed by presentations of the homework and discussions. The activity concluded with an evaluation.

How to give a presentation – lecture and exercises, National Institute of Public Health, Bucharest, Romania, June 2025

This face-to-face teaching activity was delivered on 5 and 10 June 2025 to 17 junior physicians at the National Institute of Public Health, Bucharest, Romania. To prepare for the activity, the fellow divided the participants into six groups and assigned a public health topic for a five-minute presentation. The first session included a lecture prepared by the fellow, followed by presentations from four groups, with feedback provided by peers. The second session started with a short recap, after which the remaining two groups presented their work and received feedback. The activity concluded with an evaluation.

Routine teaching and pedagogy activities

Activities and role: The fellow delivered teaching activities to students from the Faculty of Medicine, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania, attending the Epidemiology Module (sixth year of study, Romanian and English Module) and to junior physicians with the Epidemiology Module in their training curriculum established at national level (Epidemiology, Public Health, Infectious Diseases, Microbiology, Laboratory Medicine). This was in accordance with her job description.

The topics addressed were:

- Control measures of communicable diseases (lecture)
- Passive and active immunoprophylaxis (lecture)
- Recommended vaccinations for at-risk groups (lecture)
- Outbreak investigation (adapted case study)
- Outbreak investigation (lecture and adapted case study)
- Standard precautions and occupational exposure to blood (lecture)
- The role of the laboratory in communicable diseases surveillance (lecture)
- Vaccination schedules: Exercises on vaccinations
- Surveillance (practical session)
- The role of the laboratory in public health (lecture and case study based on the 2023 Introductory Course presentations and the case study regarding the gastroenteritis outbreak in Kalundborg, Denmark)
- How to present? (lecture).

Additionally, the fellow contributed to the translation and adaptation of the case study, 'Outbreak of methicillin-resistant *Staphylococcus aureus* (MRSA) in a neonatal intensive care unit' and assisted in delivering it to junior physicians attending the Epidemiology Module (6 June 2024 and 10 July 2025) as well as to specialist physicians attending a post-graduate course on Healthcare-associated Infections (7 June 2024).

Moreover, in January and February 2025, the fellow served as an invited lecturer in the weekly training activities for healthcare professionals organised within the Joint Action PERCH (PartnERship to contrast HPV vaccination). In May 2025, she participated as an invited lecturer in a post-graduate vaccinology course, delivering a lecture on vaccinations recommended for specific risk groups, including healthcare workers, individuals with chronic conditions, and close contacts.

4. Communications related to the EPIET/EUPHEM fellowship

4.1. Manuscripts submitted to peer-reviewed journals

Manuscripts at advanced stages

- **Enciu BG**, Popescu R, Zaharia A, Schimmer B, Sîrbu A, Pițigoi D, Pistol A. Epidemiology of food-borne botulism outbreaks in Romania, 2007–2024. [first submitted to *Eurosurveillance*, now planned for re-submission to *Microorganisms*]

4.2. Other reports

- **Enciu BG**. Report with the results of the first national evaluation of the implementation of infection prevention and control measures in Romanian public hospitals, 2025. Bucharest: National Institute of Public Health; 2025. Available at: <https://insp.gov.ro/centrul-national-de-supraveghere-si-control-al-bolilor-transmisibile-cnscbt/analiza-date-supraveghere/>
- **Enciu BG**. Assessment of the impact of the vaccination policies on the uptake of Human Papillomavirus (HPV) vaccination in Romania, 2020–2024. Bucharest: National Institute of Public Health; 2025. Available at: <https://insp.gov.ro/centrul-national-de-supraveghere-si-control-al-bolilor-transmisibile-cnscbt/analiza-date-supraveghere/>
- **National Centre for Communicable Diseases Surveillance and Control**. Report on the evolution of HPV vaccination, Romania, 1 December 2023–31 December 2024. Bucharest: National Institute of Public Health; 2025. Available at: <https://insp.gov.ro/centrul-national-de-supraveghere-si-control-al-bolilor-transmisibile-cnscbt/analiza-date-supraveghere/>
- **National Centre for Communicable Diseases Surveillance and Control**. Report on the evolution of transmissible diseases in Romania, 2023. Chapter VII.1. Malaria. Bucharest: National Institute of Public Health; 2024. Available at: <https://insp.gov.ro/centrul-national-de-supraveghere-si-control-al-bolilor-transmisibile-cnscbt/rapoarte-anuale/>
- **National Centre for Communicable Diseases Surveillance and Control**. Report on the evolution of transmissible diseases in Romania, 2023. Chapter II.7. Tetanus. Bucharest: National Institute of Public Health; 2024. Available at: <https://insp.gov.ro/centrul-national-de-supraveghere-si-control-al-bolilor-transmisibile-cnscbt/rapoarte-anuale/>

4.3. Conference presentations

- **Enciu BG**. Implementation of the infection prevention and control core components in Romanian public hospitals: First national evaluation (oral presentation). Presented at: European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE) 2025 (parallel session); 19–21 November 2025; Warsaw, Poland.
- **Enciu BG**, Sîrbu A, Usein C, Oprea M, Dinu S, Dragomirescu CC, Stănescu A, Zaharia A. Vaccination against diphtheria: A constant need in face of the emerging and reemerging threats (*Vaccinarea împotriva difteriei: O necesitate constantă în fața riscurilor emergente și re-emergente*) (oral presentation). Presented at: National Conference ROVACCIN; 28–29 March 2025; Bucharest, Romania.
- **Enciu BG**, Zaharia A, Popescu R, Niculcea A, Sîrbu A. HPV vaccination in Romania: the impact of reimbursement policies on vaccine uptake after one year of implementation (oral presentation). Presented at: National Conference on Microbiology and Epidemiology; 7–9 November 2024; Iași, Romania.
- **Enciu BG**, Popescu R, Halacescu A, Sîrbu A, Pistol A, Zaharia A. A food-borne botulism outbreak with eight paediatric cases in Romania, January 2024 (oral presentation). Presented at: Congress of the Carol Davila University of Medicine and Pharmacy; 24–26 October 2024; Bucharest, Romania.

4.4. Other presentations

- **Enciu BG**. Assessment of the implementation of infection prevention and control practices in Romanian healthcare facilities (*Evaluarea gradului de implementare a măsurilor de prevenire și control ale infecțiilor asociate asistenței medicale (IAAM) în unitățile sanitare din România*) (oral presentation). Presented at: Online training organised for Public Health Authorities in the context of the first research project; 23 January 2025; virtual.
- **Enciu BG**. Assessment of the implementation of infection prevention and control practices in Romanian healthcare facilities (*Evaluarea gradului de implementare a măsurilor de prevenire și control ale infecțiilor asociate asistenței medicale (IAAM) în unitățile sanitare din România*) (pre-recorded oral presentation). Sent to the 369 hospitals invited to complete the questionnaire used for the first research project.

5. EPIET/EUPHEM modules attended

- Introductory Course, 25 September–13 October 2023, Spetses, Greece
- Study Protocol and Scientific Writing, 26–27 October and 7–8 November 2023, virtual
- European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE) 2023, 22–24 November 2023, Barcelona, Spain
- Multivariable Analysis, 19–23 February 2024, Berlin, Germany
- Vaccinology, 4–8 March 2024, virtual
- Writing Abstracts for Scientific Conferences, 14 March 2024, virtual
- Qualitative Research, 19 and 22 March 2024, virtual
- Rapid Assessment and Survey Methods, 15–19 April 2024, Dublin, Ireland
- Public Health Microbiology II – Biorisk and Quality Management, 21–23 May 2024, virtual
- Public Health Microbiology I – Basic phylogeny, 17–18 June 2024, virtual
- Project Review Module, 26–30 August 2024, Lisbon, Portugal
- European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE) 2024, 20–22 November 2024, Stockholm, Sweden
- Ethics Module, 06 November 2024, virtual
- Time Series Analysis, 9–13 December 2024, Utrecht, the Netherlands
- Social Behavioural Sciences, 24–28 March 2025, virtual
- Public Health Leadership, 1–3 September 2025, Lisbon, Portugal.

6. Other training

ECDC training activities

- Introduction to R, 19–22 September 2023, virtual
- Investigation of healthcare-associated infection outbreaks, 19, 20, 25 October 2023, virtual
- Recovery from infectious disease outbreaks: From lessons identified to lessons learnt – ECDC e-learning course, 27 March 2024, virtual
- Epidemic intelligence – ECDC e-learning course, 14 April 2024, virtual
- EU Health Task Force webinar, 17 May 2024, virtual
- Investigation of healthcare-associated infection – cascading webinar, 11 June 2024, virtual
- Rapid Risk Assessment – ECDC e-learning course, 12–13 June 2024
- Health Literacy in Infectious Diseases Prevention – ECDC webinar, 26 June 2024, virtual
- ECDC/EACS webinar on Monkeypox, 21 August 2024, virtual
- ECDC/EACS webinar on Monkeypox, 4 September 2024, virtual
- ECDC/EACS webinar on Monkeypox, 18 September 2024, virtual
- Social and Behavioural Science in Action: Shaping Public Health Strategies for Infectious Disease Prevention (ECDC Webinar), 25 September 2024, virtual
- Behavioural Science in Action: Using Behavioural Science to Counteract Antibiotic Resistance (ECDC Lighthouse), 27 January 2025, virtual
- Understanding Vaccine Acceptance and Trust (ECDC Lighthouse), 20 March 2025
- GenEpi-BioTrain-Focus on the Agents of Diphtheria, 5–7 March 2025, virtual
- Vaccine acceptance and behaviour change - Introductory e-learning course for frontline health workers (ECDC), 22 March 2025, virtual
- Pilot: E-learning on the role of behavioural and social sciences in the prevention of infectious diseases (ECDC), 22 March 2025, virtual

PETAL webinars

- Health Economy, PETAL Webinar, 16 October 2024, virtual

RIVM Masterclass EPI 2024

- Masterclass EPI 2024 – Application of spatial modelling to uncover geographical disparities and improve public health surveillance data: a case study for antimicrobial resistance, 12 September 2024, virtual

WHO training

- BSAFE (World Health Organization), 13 April 2024, virtual
- Public Health Preparedness for Mass Gathering Events (World Health Organization), 13 April 2024, virtual
- Intercountry Workshop WHO-IOM-EU EU4Health Joint Action on Ukrainian refugees, 18–19 February 2025, Bucharest, Romania

National training activities

- Scientific Days of the National Institute of Infectious Diseases “Prof. Dr. Matei Balș”, 14–17 September 2023, Bucharest, Romania
- National Conference on Microbiology and Epidemiology, 9–11 November 2023, Bucharest, Romania
- Expert workshop on Cervical Cancer Elimination organised by the National Institute of Public Health from Romania in collaboration with World Health Organization, 17 November 2023, Bucharest, Romania
- National Conference ROVACCIN, 16–17 March 2024, Bucharest, Romania
- Vaccination workshop (Romanian Society of Epidemiology), 27–28 September 2024, virtual
- National Conference on Microbiology and Epidemiology, 7–9 November 2024, Iași, Romania
- Preparation and Response to Public Health Events - International, European, and National Regulations – pre-conference course, 7 November 2024, Iași, Romania
- Workshop on cervical cancer prevention organised by WHO Country Office for Romania and the National Institute of Public Health, 14 November 2024, Bucharest, Romania
- Workshop on HPV vaccination organised by the Center for Health Policies and Romanian Society of Family Medicine, 28 November 2024, Bucharest, Romania
- NIPH Conference, 20–21 February 2025, Bucharest, Romania
- National Conference ROVACCIN, 28–29 March 2025, Bucharest, Romania

Other international training activities

- STIs - Lessons from History, IUSTI Europe webinar, 31 January 2024, virtual
- Advancing the Agenda - Achievements and Future Directions (Webinar on PAHO's initiative for the elimination of communicable diseases), 31 July 2024, virtual
- Train-the-trainer programme organised by the PROTECT-Europe initiative on HPV vaccination, September–October 2024, virtual
- Online mentorship workshop (European Union’s Research and Innovation Programme Horizon Europe project “ALLIANCE4LIFE_BRIDGE”), 3 April 2025, virtual
- Enhancing health management competences across diverse care settings (SDA Bocconi School of Management for European Health Management Association - EHMA), 23–27 April 2025, virtual

7. Other activities

Seventy-fourth session of the WHO Regional Committee for Europe (RC74), Copenhagen, Denmark, October 2024

The fellow participated as part of the Romanian delegation at the 74th session of the WHO Regional Committee for Europe (RC74), held in Copenhagen, Denmark, from 29 to 31 October 2024. During this three-day meeting, the fellow attended the election process and all the other RC74 sessions, took part in daily coordination meetings with EU Member States, drafted and delivered Romania’s statement supporting the initiative on *Preparedness, response, and resilience for health emergencies in the WHO European Region 2024–2029: a new regional strategy and action plan (Preparedness 2.0)*. During this activity, the fellow was supervised by Prof. Dr. Adriana Pistol, her co-supervisor.

Acknowledgements

The fellow would like to express her deepest gratitude to her site supervisor, Alina Zaharia, and her frontline coordinator, Barbara Schimmer, for their advices, consistent support and guidance throughout her fellowship. She sincerely thanks Prof Dr Adriana Pistol for her ongoing support, insightful guidance and encouragement, which were instrumental in shaping her career. Special appreciation is extended to Anca Sîrbu for her valuable expertise and to all the colleagues from the National Institute of Public Health, for generously sharing their knowledge. Her heartfelt thanks also go to Javier del Aguila Mejia for his guidance and encouragement, and to her colleague, Andreea Niculcea, for her support during the fellowship journey, including guidance during one of the fellowship tasks. She would like to say thanks to all the EPIET, EUPHEM and MediPIET fellows and coordinators for their companionship. Finally, she is profoundly thankful to her family for standing by her in every decision she makes.