e-Learning pilot course

Use of Pandemic and Epidemic Intelligence systems with a particular focus on event-based surveillance for pandemic preparedness and early warning

July 1, 2023 - October 1, 2023

organised by

Istituto Superiore di Sanità

Presidency
Training Office
and
Department of Infectious Diseases

in collaboration with

WHO Hub for Pandemic and Epidemic Intelligence, World Health Organization (WHO)
US Centers for Disease Control and Prevention (US CDC)
European Centre for Disease Prevention and Control (ECDC)

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Introduction

The Rome Declaration (Global Health Summit 21 May 2021, Rome) and resolutions adopted in the 69th and 74th World Health Assemblies call for a stronger public health workforce to protect populations, accelerate progress towards the achievement of the sustainable development goals, and the achievement of universal health coverage. Further, the COVID-19 pandemic has highlighted the central role of public health professionals in the preparedness for, response to, and recovery from epidemics and health emergencies.

Within the framework of the 2020 Italian Presidency of the G20, in collaboration with the Ministry of Health, the Istituto Superiore di Sanità (ISS) has promoted an innovative project called "Public Health Workforce Training *Laboratorium*". The *Laboratorium* project aimed at increasing the training of the Public Health Workforce to better face current and potential future health challenges. The *Laboratorium* was acknowledged and endorsed by the Declaration of the G20 Health Ministers, convened in Rome, Italy, on 5th and 6th September 2021 and by the Final Declaration of the Leaders on 3rd October 2021.

In the context of the *Laboratorium*, a prototype e-Learning course based on competence-oriented active learning – Problem Based Learning was designed.

The topic chosen to pilot the prototype e-Learning course is Epidemic Intelligence (EI). Epidemic Intelligence (Paquet et al. 2006) encompasses all activities related to early identification of potential health hazards, their verification, assessment and investigation in order to recommend public health control measures. The course includes different approaches on EI with the participation of the World Health Organization (WHO), the European Centre for Disease Prevention and Control (ECDC), the United States Centers for Disease Control and Prevention (US CDC) and the Italian Istituto Superiore di Sanità (ISS). The course also includes videos of some countries' experiences in implementing EI systems. This course aims to support the creation of a culture of epidemic intelligence and increase awareness of the WHO EIOS initiative that could bridge access of countries to trainings and specific technical support.

Course and learning outcomes

Course aims are:

- to widen knowledge, skills and attitudes of public health professionals on the fundamental principles of the epidemic intelligence, with a specific focus on event-based surveillance as a tool to enhance preparedness and early warning;
- to strengthen competencies on EI, piloting a common international training approach, understanding the added value of EI in their national context.

Practice activity: Upon course completion, participants will be able to evaluate the potential use/applicability of Epidemic Intelligence systems with a particular focus on event-based surveillance for preparedness and early warning, at country/institution level (in context).

Learning and delivery method

The Competency-Based Education (CBE) model is integrated, in the pilot course, with the Problem based learning (PBL).

WHO developed CBE validating it on the Global Competency Framework for UHC (WHO, 2021). CBE emphasizes practical activities to be provided and the competencies of the individual who provides them.

PBL, in the e-Learning adapted version developed by ISS, is the educational approach underpinning the e-Learning pilot course. PBL encourages participants to identify their learning goals by analysing and solving a problem linked to their professional setting. It has been used to develop the learning activities associated to the learning outcomes.

The course is delivered by the ISS e-Learning platform EDUISS (https://www.eduiss.it).

Course Structure

The e-learning course includes:
Introductory resources

- Introduction and General Objectives
- Participant guide
- Self-assessment test (Learning outcomes: knowledge, skills, attitudes)

PBL Cycle - Learning Activities (One learning Unit)

- Problem analysis and Learning objectives identification (Exercise)
- Supporting and Study/Reading materials
- Audio-video Tutorials developed by content experts
- Short audio-video
- Expert problem solution

Conclusive resources

- Self-assessment test (Learning outcomes: knowledge, skills, attitudes)
- Final certification test (Learning outcomes: Knowledge)
- Satisfaction questionnaire
- Certification

Additional resources: Forum news; Lateral block including interactive research on available database, links to official sites; audio-video; Help desk (e-mail); FAQs section (Frequently Asked Questions).

The estimated course length is **16 hours**. Participants can access the course at any time.
The e-Learning course is asynchronous low interaction (stand-alone interactive learning materials); free of charge

Training Evaluation

The **final test** for all attendees is based on a multiple-choice questionnaire (MCQ), successfully passed on a 75% basis of correct responses. The final test can be attempted no more than three times.

Besides that, participants are requested to complete the following mandatory tests:

- **pre and post training test:** self-assessment to assess the initial knowledge and improvement after training. It is a compulsory test, but a negative result will not affect participation;
- **preliminary and final skills and attitudes self-assessment test**: to evaluate changes in skills and attitudes;
- **satisfaction questionnaire**: all participants complete the questionnaire at the end of the course.

Faculty (content experts who have developed the training materials)

Philip AbdelMalik - Epidemic Intelligence from Open Sources (EIOS) Core Team, Intelligence Innovation and Integration (III) Unit, WHO Hub for Pandemic and Epidemic Intelligence, Health Emergency Intelligence and Surveillance Systems (WSE) Division, Berlin, WHO Health Emergencies Programme (WHE)

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Arthur Ray - Global Disease Detection Operations Center (GDDOC), US Centers for Disease Control and Prevention (CDC), USA

Flavia Riccardo - Department of Infectious Diseases, Istituto Superiore di Sanità, Rome, IT

Audio-Video Interview

Flavia Riccardo, Istituto Superiore di Sanità (ISS)
Nada Al-Marzooqi, Public Health and Prevention Department at the Public Health Sector in the Ministry of Health and Prevention of United Arab Emirates UAE

Scientific Coordinators

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Scientific secretariat for e-learning methods (FAD) and technologies

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Contribution to the conceptualisation of methods (CBE method)

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Production of multimedia materials

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Organizing Secretariat

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Testing phase

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Katerina Crawford, Grazina Mirinaviciute, European Centre for Disease Prevention and Control
Catherine Chow, US Centers for Disease Control and Prevention, USA

Target Audience
The course is aimed at professionals engaged in public health functions.
The course is mainly intended for professionals in charge of designing/resourcing the development of Public Health Intelligence capacity.

Maximum 500 attendees

Language: English

Course availability: from July 1, 2023 to October 1, 2023

Registration: from July 1, 2023 to September 22, 2023

Registration procedures
Applicants need to register at https://www.eduiss.it (a registration guide is available at https://www.eduiss.it/mod/page/view.php?id=557).

To enroll in the courses, applicants need to access the EDUISS platform entering their credentials in the "Login" window. In the "ISS-G20 Laboratorium: International Courses" folder, click on “Use of Pandemic and Epidemic Intelligence systems with a particular focus on event-based surveillance for pandemic preparedness and early warning” and click on “Enroll me”.

For content, technical and/or methodological issues, please contact: formazione.fad@iss.it

[Firma elettronica del Presidente]