

EURL-PH-AMR

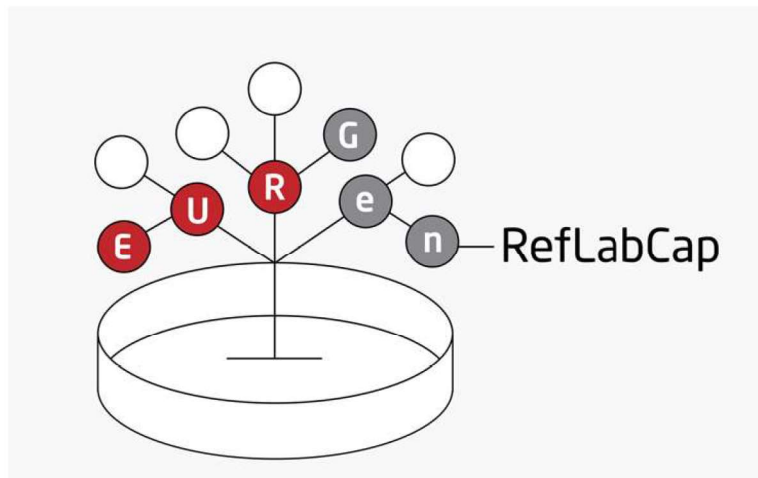
European Reference Laboratory for Public Health
in the field of AMR



Camilla Coia cmwi@ssi.dk

FWD-AMR Network Meeting 30 October 2024

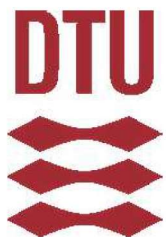
The EURGen-RefLabCap project 2021-2024



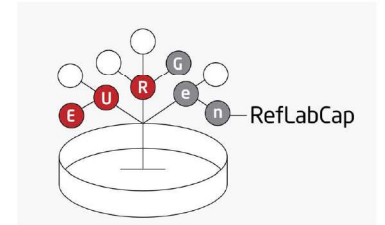
Capacity building activities provided to national reference laboratories (NRLs) for public health for the specified organisms **to improve NRLs' functions for AMR**

Strengthening the role of NRLs for public health **to build capacities in regional and local laboratories** in the health systems of their countries

Modernisation of diagnostic and molecular typing tests used in health systems for the specified organisms using whole genome sequencing (WGS)



EURGen-RefLabCap



Priority pathogens

- CCRE – Carbapenem- and/or colistin-resistant Enterobacterales (workstream 1)
- CRAb - Carbapenem- and/or colistin-resistant *Acinetobacter baumannii* (workstream 2)
- CRPa - Carbapenem- and/or colistin-resistant *Pseudomonas aeruginosa* (workstream 2)

Participating countries

27 EU Member States, Iceland, Norway, Albania, Bosnia and Herzegovina, *Kosovo, Moldova, Montenegro, North Macedonia, Serbia and Türkiye

Priority countries (receiving targeted support for building NRL capacity and implementing WGS)

Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czechia, Estonia, Greece, Italy, Latvia, Lithuania, Romania, Serbia and Slovenia.

Additional countries (receiving targeted support for implementing WGS)

Moldova, Poland, Portugal and Spain

*This designation is without prejudice to positions on status, and is in line with United Nations Security Council resolution 1244/99 and the International Court of Justice Opinion on the Kosovo declaration of independence.

EURGen-RefLabCap

Networking and support activities

- **All countries** were offered participation in:
 - Network meetings
 - On-site training workshops
 - Virtual training workshops
 - Virtual simulated outbreak exercises
 - EQA exercises
 - Webinars
- **Mapping of capacity for NRL core functions/methodologies**
- **Development of guidance/protocols (WGS and QC)**
- **Targeted support to priority countries/additional countries***
 - NRL action plans for development of capacity and bespoke consultancy
 - Country visits
 - WGS surveillance pilot studies (purchase of Nanopore equipment)*
 - Exercise to enhance the advisory role of the NRLs towards national networks of clinical labs*
 - Laboratory training exercises*

Designation of EURL for public health in the field of AMR



Call for Applications for the Designation of an EU Reference Laboratory for Public Health in the field of Antimicrobial Resistance (AMR) in bacteria

COMMISSION IMPLEMENTING REGULATION (EU) 2024/892

of 22 March 2024

designating European Union reference laboratories for certain specific areas of public health

(Text with EEA relevance)

STATENS
SERUM
INSTITUT 

DTU 

 EUCAST

The roles of EURL-PH-AMR

- Organises and implements laboratory support activities under agreed workplans for disease network members
- Coordinates implementation of activities with disease networks, ECDC and other relevant EURLs / outside initiatives, as needed
- Participates as member in network of EURLs

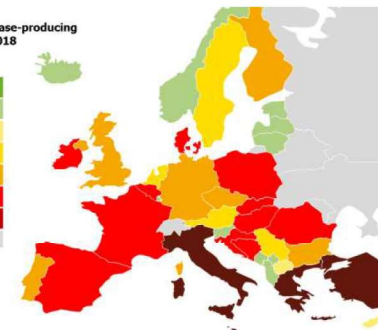


EURGen-Net

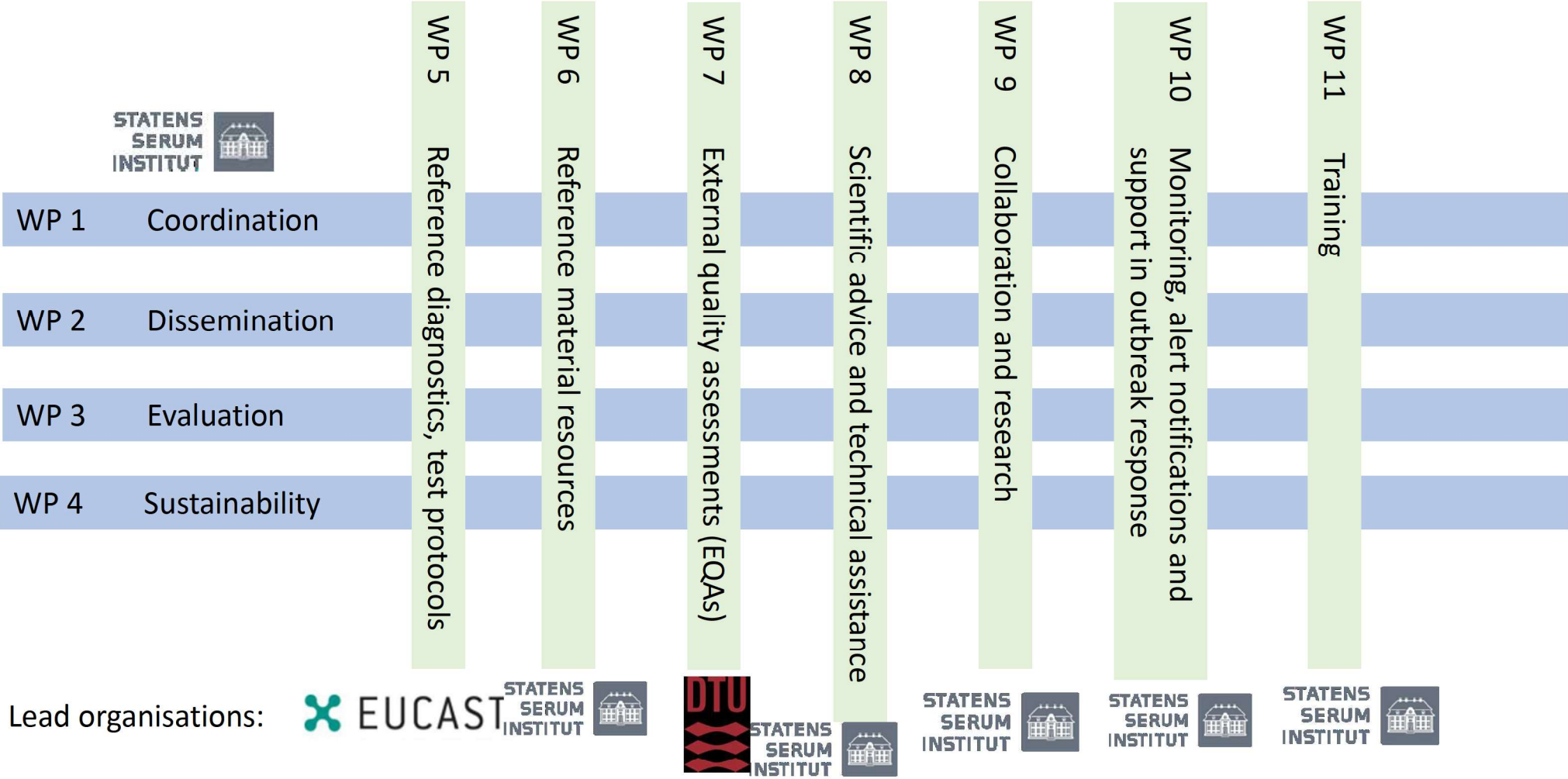
Spread of carbapenemase-producing Enterobacteriaceae, 2018



Source: Biskind et al. Eurosurveillance 2018



Structure of work plan – EURL-PH-AMR



WP 5 – Reference diagnostics, including test protocols – Lead: EDL

WP5 is responsible for providing phenotypic and functional reference testing services, including confirmation of resistance mechanisms (EURGen-Net)


- Objectives are:



NEW

- To provide phenotypic and functional reference testing to support EU-level outbreak investigations on priority pathogens and other emerging resistance threats
- To contribute to collection of isolates of interest during EU-level outbreaks

WP 7 - External quality assessments (EQAs) – Lead DTU and SSI

-  • To perform EQA of **species ID and phenotypic AST** based on case descriptions by local clinical laboratories being part of **EARS-Net** (Lead: DTU)
- To provide EQA of the quality of **phenotypic AST and genomics testing for the NRLs** being part of the **EURGen-Net** (Lead: SSI)

WP 8 - Scientific advice and technical assistance - Lead SSI

Objectives are:

- **To assess laboratory capacity in EURGen-Net and develop and implement plans for capacity strengthening activities** that address the identified gaps
- **To provide tailored support to the EURGen-Net laboratories** to strengthen and build capacity for AMR genomic surveillance and outbreak investigation of priority pathogens





WP 9 - Collaboration and research – Lead SSI

Objective is:



- To identify research needs, design and conduct a collaborative research study to strengthen collaboration and expertise among members of EURGen-Net.

WP 10 - Monitoring, alert notifications and support in outbreak response - Lead SSI

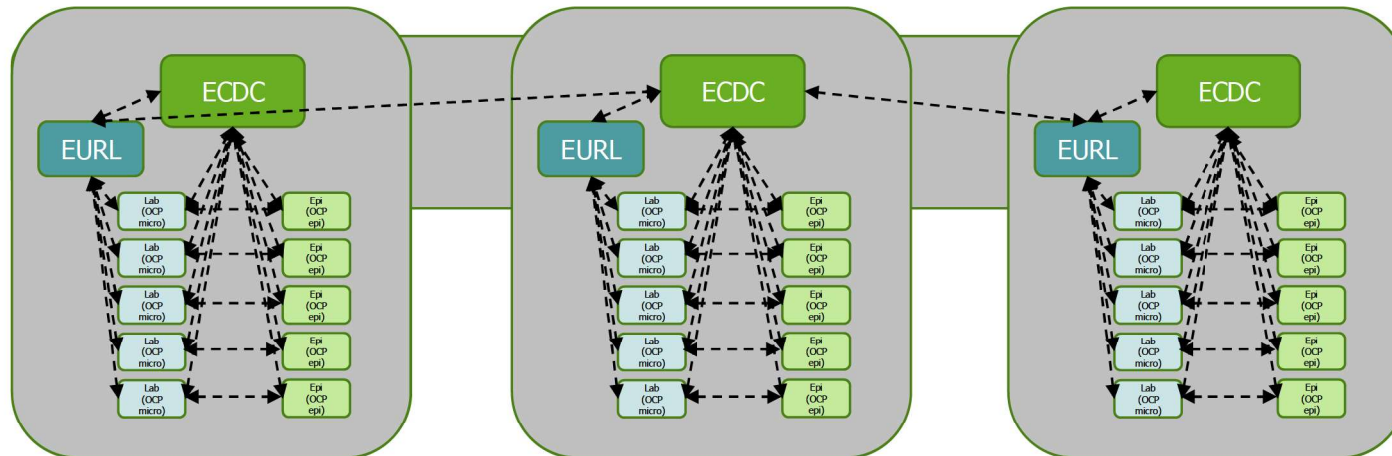
- The objective is to establish a scientific and technical advisory function for the members of EURGen-Net and ECDC, including:
 -  **NEW** • **Supporting national outbreak and cross-border investigations (up to 4 incidents year)**
 -  **NEW** • Scientific and technical advice on **phenotypic and genotypic reference testing, microbiological and bioinformatic analysis**
 -  **NEW** • Support to the operational contact points **on reporting data** on national **cross-border outbreaks**
 -  **NEW** • **Provide advice on analysis and reporting of molecular surveillance data** for monitoring of priority pathogens on *ad hoc* basis
 - Provide guidance documents (e.g. consensus protocols).

WP11 - Training - Lead SSI

Objective is:

- To deliver training activities aimed at expanding knowledge and skills required to develop and implement national prevention, preparedness and response plans (aligned with 2022/2371 on serious cross-border threats to health).

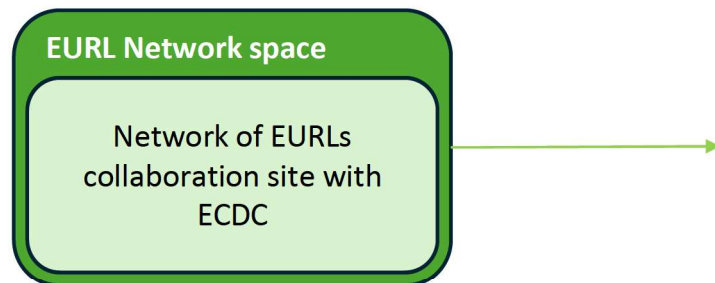
Implementation of the network of EURLs



According to SCBTH, “the network of EU reference laboratories shall be operated and coordinated by the ECDC, in cooperation with the WHO reference laboratories”

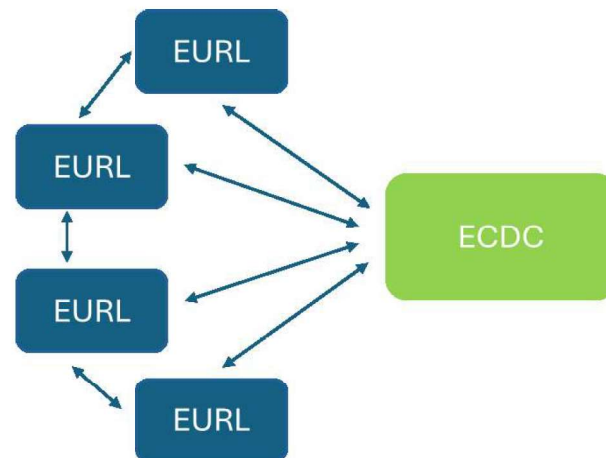
ECDC to organise regular meetings for this

Communication on network of EURL activities



ECDC Hosted platform to:

- Streamline dissemination of information from ECDC to EURLs
- Facilitate communications among all operational EURLs
- Sharing of EURL relevant documents and resources
- Sharing of relevant training dates and activities planned
- Contact lists of EURL consortia members



Who is who* in the EU?



European Commission



European Health Emergency Preparedness and Response Authority (DG HERA)



Directorate-General for Health and Food Safety (DG SANTE)



Joint Research Centre (JRC)

Executive agency



Decentralised agencies



European reference laboratories



Public health



Food safety and animal health



In Vitro Diagnostics

*: Of direct or indirect relevance for EU-level public health work

Acknowledgements

Core Team – EURGenRefLabCap

Rene Hendriksen, DTU

Birgitte Helwigh, DTU

Anders Rhod Larsen, SSI

Valeria Bortolaia, SSI

Camilla Coia, SSI

Ana Rita Bastos Rebelo, DTU

Jette Sejer Kjeldgaard, DTU

Susanne Karlsmose, DTU

Lina Cavaco, SSI

Henrik Hasman, SSI

Berit Müller-Pebody, SSI

Proposal team EURL-PH-AMR

Anders Rhod Larsen, SSI

Camilla Coia, SSI

Rene Hendriksen, DTU

Birgitte Helwigh, DTU

Oskar Ekelund, EDL

Gunnar Kahlmeter, EDL

Organisations

HaDEA

DG SANTE

ECDC