



FWD AMR. RefLabCap

STATENS
SERUM
INSTITUT



**Welcome to the 2nd networking meeting
26-27 April 2023**

Eva Møller Nielsen, project leader
Foodborne Infections, SSI, Denmark

Welcome to 2 days' of networking

- Project activities
- Updates from ECDC and DG-SANTE
- Exchange of experience on
 - WGS implementation
 - Accreditation of bioinformatics pipelines
 - National capacity building
- Updates from EURLs in food safety
- Cross-sector collaboration
- **Discussions & networking**

Two locations for the meeting

- Today at Radisson Hotel
 - dinner in the city close to hotel
Cabinn City
- Tomorrow at Statens Serum
Institut (SSI)

Participants

In-person meeting for all network participants

- 50 participants from NRLs for Salmonella and Campylobacter
 - 30 countries represented
- 4 representatives from 3 EURLs in food safety
- 2 representatives from ECDC
- 1 online presentation by DG SANTE
- Project team members from SSI and DTU

Network of laboratories

National reference laboratories in public health on AMR in Salmonella and Campylobacter

Laboratories functioning as NRL on AMR in *Salmonella* and/or *Campylobacter*

32 countries are network participants:

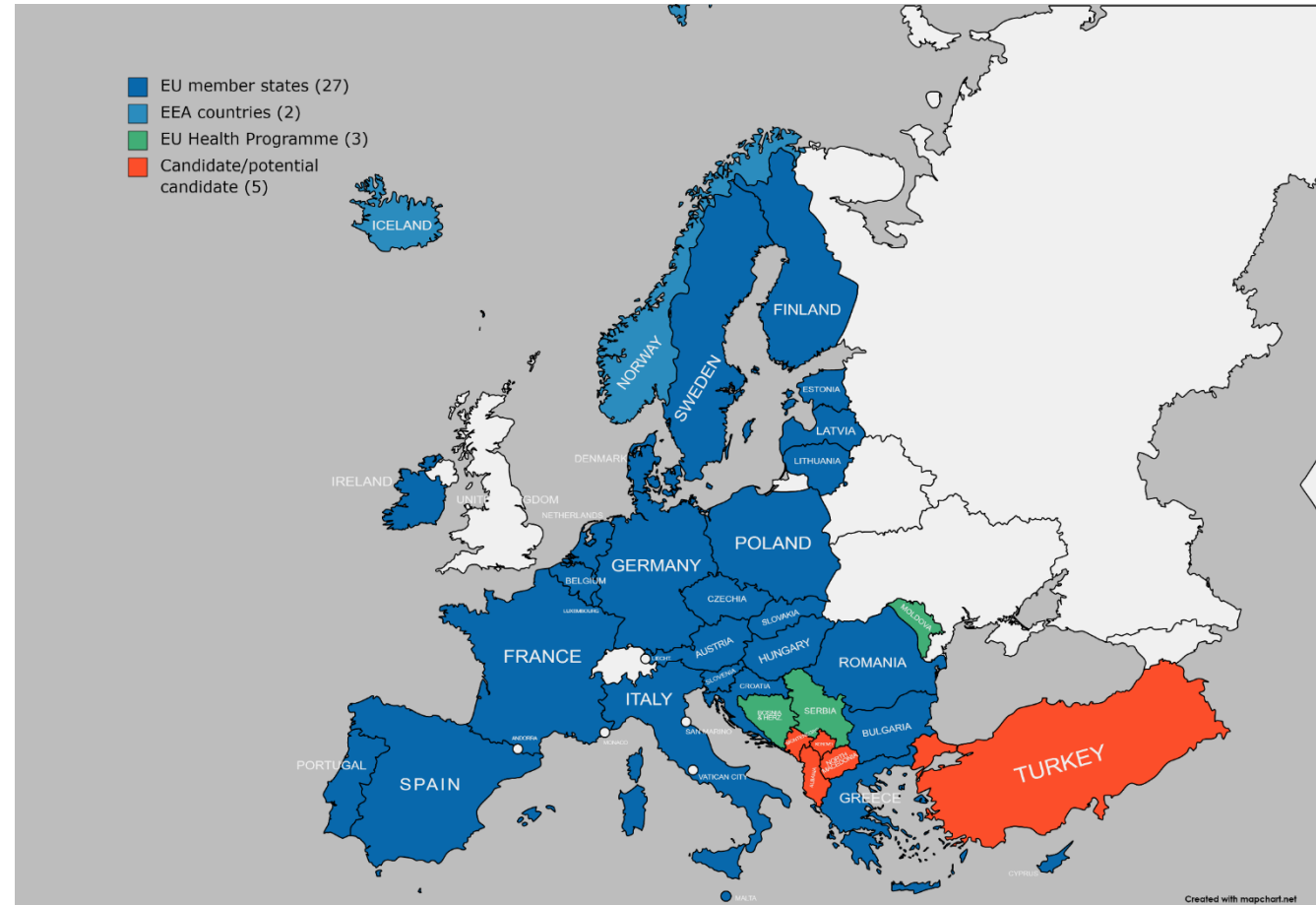
- EU/EEA countries
- Additional EU Health Programme countries

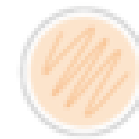
5 candidate/potential candidate countries
Invited for all online meetings

Total of 45 laboratories in 37 countries

29 countries: 1 NRL covers Salm+Campy

8 countries: 2 NRLs





FWD AMR-
RefLabCap



Project activities 2021 →

Project activities

Networking

- Network meetings
- Workshops
- Online presentations/discussions
- Email communication, website, slack channel

Guidance

- Minimal and optimal requirements for AMR surveillance
- Standard WGS protocol
- Proposal for updated EU protocol for harmonised AMR monitoring
- Model protocol for national surveillance of AMR
- Guidance document on internal quality control schemes

Training

- AMR testing and surveillance
- Outbreak investigations
- WGS data analysis and interpretation
- Annual ring-trials to assess bioinformatics pipelines
- Annual EQAs: AST, genotypic AMR prediction, etc.

Targeted support

- Action plan development and implementation in priority countries
- Local/regional capacity building support in priority and in additional countries
- Support for national laboratory network establishment

Networking

- Networking is a key element of the project. The goal is to
 - facilitate a strong network of laboratories
 - facilitate exchange of experience and knowledge
 - be valuable for laboratories at all levels of development

Networking is facilitated through the general meetings, webinars and online workshops

- 3 network meetings (in-person attendance)
 - 1st network meeting (changed to online): 30 Nov-1 Dec 2021
 - 2nd network meeting scheduled for 26-27 April 2023, Copenhagen
 - 3rd network meeting planned for autumn 2024, Copenhagen

Guidance documents and protocols

- Recommendations of minimum and optimal requirements
- Proposed methodologies, WGS-protocol
- Agreed WGS-based protocol and analysis
- Proposal for updated EU protocol
- Draft national model protocol
- Guidance document on internal QC schemes

Training for all laboratories

Lab training courses at DTU in 2021

- *Salmonella* AMR
- *Campylobacter* AMR

A series of multi-disciplinary training workshops/webinars



- Public health microbiologists and epidemiologists
- Training on topics related to AMR surveillance of human Salm/Campy infections, incl. integration of WGS to national AMR surveillance and outbreak investigation
- 1st workshop, Nov 2022:
 - National surveillance and added value of WGS
 - Updated EU protocol + Model protocol for national surveillance of AMR
 - Establishing/optimising national surveillance of AMR (group discussions)
 - Principles, added value and costs of WGS for surveillance/outbreak investigations
- 2nd workshop (Oct 2023): Using WGS for surveillance and outbreak investigations
- 3rd workshop (2024): Outbreak exercises

Annual EQA and ring-trial for WGS-based resistome profiling



- Annual *in vitro* EQA for WGS-based resistome profiling
 - 1st round 2022: test strains of Salmonella and Campylobacter
 - Final report available
 - 2nd round 2023: DNA of test strains
 - Will run this spring
 - Report by the end of 2023
 - 3rd round 2024
- Annual *in silico* ring-trial on bioinformatics pipelines
 - 1st round 2022: Sequences of 8 test strains for analysis
 - Final report available
 - 2nd round 2023:
 - Will run this spring
 - Report by the end of 2023
 - 3rd round 2024

Targeted support for national capacity building

- Priority countries
 - Implementation of action plans
 - State-of-play in priority countries (and other countries) – mapping exercise
 - A range of activities, incl. country visits
- Support to NRLs in regional capacity building (also non-priority countries)
 - Support to establish national lab network
 - Train the trainers workshops/webinars (to be based on mapping output)
 - 2023, autumn
 - 2024

Agenda day 1

Time	Topic	Presenter
9:00-10:30	Session 1: Project overview	
	Welcome – meet and greet	Eva Møller Nielsen, SSI
	Project activities, overview of first 2 years	Eva Møller Nielsen, SSI
	Evaluation of project activities	Egle Kudirkiene, SSI
	EQA1-WGS-AMR and RingTrial1-WGS-AMR	Malgorzata Ligowska-Marzeta, SSI
10:30-11:00	Coffee/tea and bread	
11:00-12:30	Session 2: Update from DG SANTE and ECDC	
	Update from DG SANTE	Julia Langer, DG SANTE
	ECDC strategy on using WGS for AMR surveillance	Cecilia Jernberg, ECDC
	Reporting of WGS data for AMR – how to do it, analyses, outputs in EpiPulse	Therese Westrell, ECDC
	EQA8-AST	Jeppe Boel, SSI
12:30-13:30	Lunch	
13:30-15:00	Session 3: Exchange of experience	
	The Establishment of the Irish Campylobacter Reference Laboratory Service and Results from 2022	Tee Keat Teoh, Ireland
	Implementing WGS-based surveillance of Salmonella and Campylobacter in Finland	Marianne Gunell, Finland
	WGS and bioinformatics workflow for Campylobacter sp. surveillance in France	Quentin Jehanne, France
	The implementation of ISO accredited bioinformatic pipelines for AMR detection and how to report? - Discussion	Maaïke van den Beld, The Netherlands
15:00-15:30	Coffee/tea and cake	
15:30-16:45	Session 4: Exchange of experience, continued	
	Discussion in groups: propose topics for continued exchange of experience in the network	All
	Plenum discussion	
17:00-18:00	Walk and talk to restaurant Gorilla, Flæsketorvet 63 (3,2 km via Bryggebroen; 45-60 min)	All
18:00-20:30	Dinner at Gorilla, Kødbyen	

Agenda day 2

Time	Topic	Presenter
9:00-11:00	Session 5: National capacity building	
	Follow-up on day 1 and intro to day 2	Eva Møller Nielsen, SSI
	Model protocol & Overview of priority countries work	Egle Kudirkiene, SSI
	First experience of using NGS for Salmonella characterization in Latvia during FWD AMR-RefLabCap project	Oksana Savicka, Latvia
	Introducing WGS for Salmonella and Campylobacter at Mater Dei Hospital, Malta	Rodianne Abela, Malta
	Priority or minimum panel for testing – phenotypic vs genotypic, public health needs vs One Health - Discussion	Therese Westrell, ECDC
11:00-11:30	Coffee/tea + fruit	
11:30-13:30	Session 6: Cross-sector collaboration	
	EURL-Campylobacter: Whole genome sequencing and cluster analysis of Campylobacter	Ásgeir Ástvaldsson, SVA
	EURL-STEC: ARIES platform and Inter EURLs Working Group on NGS	Federica Gigliucci, ISS
	Experience on cross-sector collaboration, Denmark	Susanne Schjørring, Denmark
	Outbreak caused by CPO in medicine	Henrik Hasman, Denmark
	Wrap-up	
13:30-14:00	Sandwich to-stay or to-go	