

European Antimicrobial Resistance Genes – Reference Laboratory Capacity (EURGen-RefLabCap)

SC 2019 74 01

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European Antimicrobial Resistance Genes Surveillance Network (EURGen-Net)

- In 2019, launched a survey of carbapenem- and/or colistin-resistant Enterobacteriaceae (CCRE survey).
 - to complement the phenotypic data available from the European Antimicrobial Resistance Surveillance Network (EARS-Net) with genomic information to identify high-risk clones

- To support countries in developing technical capability and proficiency for genomic-based surveillance of MDR bacteria in hospital infections
- Strengthen coordination, support and capacity in public health national reference laboratories (NRL) functions



4 years,

- support training, external quality assessment (EQA) schemes and networking activities to improve NRL functioning at regional and national levels in countries participating in the EU Health Programme
 - 37 in total
- WS 1: carbapenem- and colistin-resistant *Enterobacterales* (CCRE)
- WS 2: two additional pathogens to be selected (by ECDC NFPs):
 - carbapenem- and/or colistin-resistant *Pseudomonas aeruginosa*
 - carbapenem- and/or colistin-resistant *Acinetobacter baumannii* complex
 - methicillin-resistant *Staphylococcus aureus* (MRSA)
 - vancomycin-resistant enterococci (VRE)

- Capacity building activities provided to public health NRLs for the specified organisms to improve their functions
- Strengthening the role of NRLs to build capacities in regional and local laboratories of their countries
- Modernisation of diagnostics and molecular typing tests for the specified organisms using whole genome sequencing (WGS)



How to do this?

- Review existing capacities of the NRLs
- Establish reference laboratory network
- Survey to identify capacity gaps based on the 5 core functions for NRLs
 1. Reference diagnostics
 2. Reference material resource
 3. Scientific advice
 4. Collaboration and research
 5. Monitoring, alert and response
- Create plans for technical support to meet the identified gaps and needs

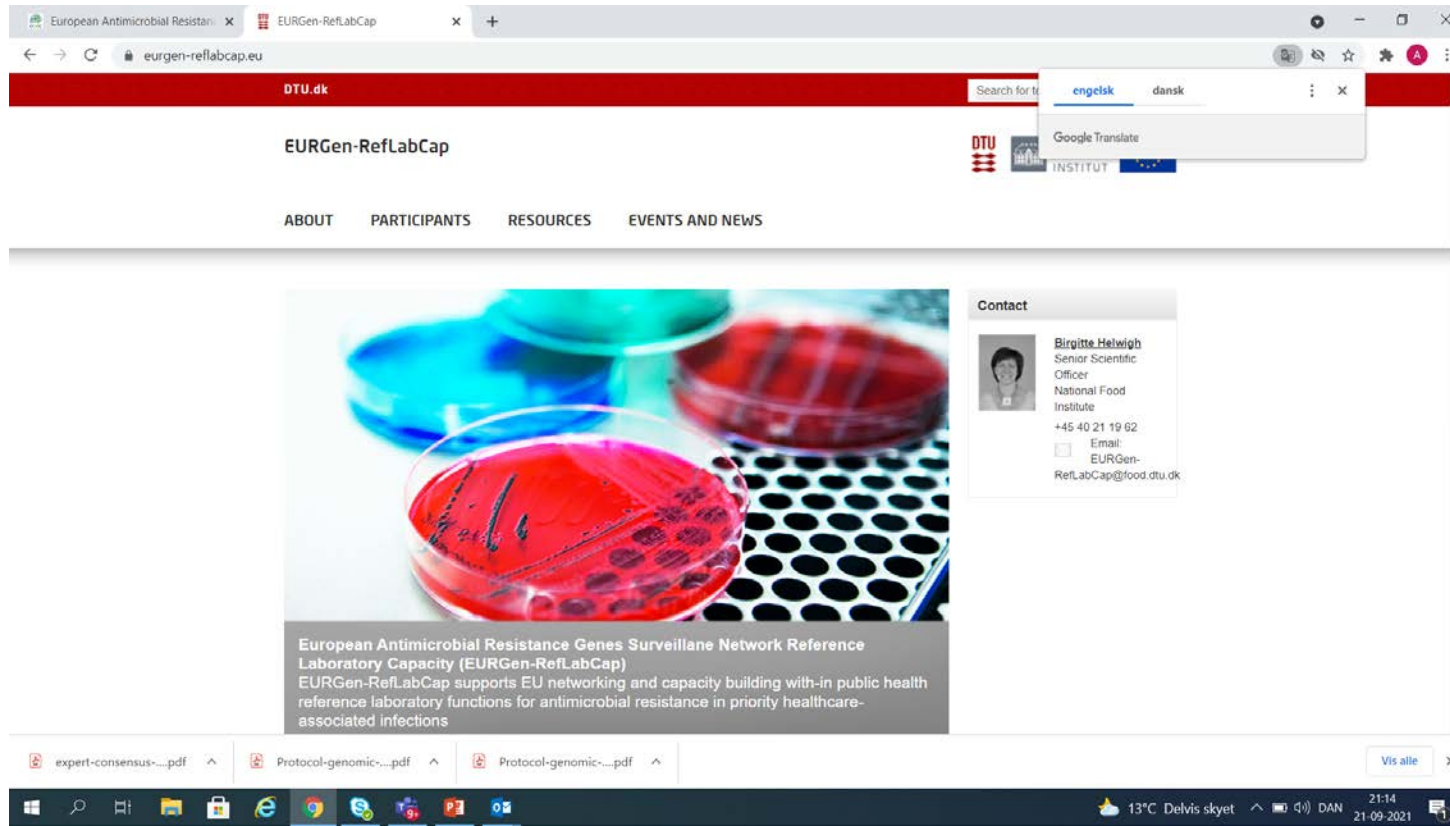
Activities provided

- **Identify priority countries (8-12)**
- Individual action plans for each of the priority countries
- Provide tailored operational support/ training to priority countries addressing the identified gaps, especially for WGS
 - Country visits- planned in the end of the year

All

- Propose *in vitro* and *in silico* quality assurance scheme(s) to be executed annual for years 2, 3 and 4

- Create website to host resources, www.eurgen-reflabcap.eu



- First network meeting for all participating countries planned in December
- Engagement is the key word

