European Reference Laboratory Network for Tuberculosis

European Centre for Disease Prevention and Control
Why an EU Reference Laboratory Network?

- Situation analysis, 2008:
  - TB epidemiologic situation in the EU, 2008:
    - Culture coverage in 2008:
      - 35-85% culture confirmation
      - Decreased since 2007
    - DST on Rif & INH in EU/EEA:
      - Unknown for 1/3 cases
- Added value for European Reference Laboratory Network for TB
- Need for improved culture coverage in EU
ECDC Tuberculosis Programme

**European Reference Laboratory Network for Tuberculosis**

Consists of officially nominated laboratories from EU Member States, EFTA and EEA countries (& candidate countries).

**Services and activities, e.g.:**
- Training
- Harmonisation of methods
- EQA

**Consortium for Network Support (CNS)**¹
- Coordination
- Communication
- Training
- Quality assurance

¹ Funded by ECDC

**MDR-TB molecular surveillance**¹

**Int'l organisations, associations, initiatives**²
- CDC, WHO, KNCV, GLI, WHO/IUATLD supra-national reference laboratory network for tuberculosis

**Cross-cutting projects**³
- TB-PAN-NET

**Academia**

**Neighbouring countries**

---

¹ Funded by ECDC

ECDC Tuberculosis Programme
Who are the ERLN-TB Partners?

- 30 EU/EEA
- 3 candidate countries
- 1-2 laboratories with reference functions per Member State
- Officially nominated by Member States

European Reference Laboratory Network for Tuberculosis
Consists of officially nominated laboratories from EU Member States, EFTA and EEA countries.
The Consortium for Network Support (CNS)

✓ Consists of partners (laboratories) from 23 countries.

Support the ECDC in achieving the objectives of the ERLN-TB.

To reach the ultimate goals with an ERLN-TB:

✓ Methods harmonisation between TB laboratories.
✓ Establishing EU-wide quality assurance of diagnostic methods.
✓ Increasing human resources through Training activities.
✓ Liaising with other international initiatives to build synergy.
1. Establishment and co-ordination of a network

1st Annual Meeting (January, 2010):
✓ 35 ERLN-TB representatives present.
✓ Establishment of Network and 1st activities conducted.

Handbook of core methods:
✓ Evidence-based resource for ERLN-TB on diagnostic methods covering:
  ✓ Microscopy, culture, drug-susceptibility testing, molecular fingerprinting, latent TB diagnosis, biosafety, quality control.

“Biobook” on all partner laboratories:
✓ Who does what – mapping competencies and expertise within the network.
2. External Quality Assurance (EQA) schemes

Strengthening and promoting quality assurance systems in the EU:

→ Pillar in assuring quality TB diagnostics.
→ In line with WHO-established EQA systems.

1st round of EQA - ongoing:

✓ Collaboration with INSTAND - WHO collaborating centre for EQA.
✓ Smear microscopy, culture, identification, first line drug-susceptibility testing.

→ Establish baseline of quality within ERLN-TB.

2nd round of EQA - upcoming:

✓ Include - 2nd line drug-susceptibility testing, WHO endorsed Line Probe Assays for identification and drug-susceptibility testing of Rif and INH.
3. Capacity building

Capacity building activities at every annual meeting:

- **Hot topic** year 1 – Biosafety and Internal Quality Control.

**TB Support Experts:**

- Cadre of TB laboratory experts within the EU.
- Resource for ECDC in providing country support in laboratory issues
- Unlimited spill-over effect → Important resource for international activities (e.g. WHO laboratory support).
- 1st cohort selected and 1st training module completed.
Next steps within the ERLN-TB

2nd annual meeting:
✓ Include next capacity-building session.

Resources within the Network:
✓ Develop list available and needed reference services
✓ Develop strain collection within the network

EQA:
✓ Plan for 2nd round – include 2nd line drugs & Line Probe Assays

Capacity-building:
Acknowledgments

CNS Management Team (led by HPA):
- Francis Drobniewski – CNS coordinator
- Sarah Mitchell - CNS Project Manager
- Vlad Nikolayevskyy - CNS Project Scientist
- Yen Holicka - CNS Project Administrator

- Daniela Cirillo
- Sabine Rusch-Gerdes
- Sven Hoffner
- Girts Škenders
- Vibeke Østergaard Thomsen

ECDC team:
- Davide Manissero – TB Programme coordinator
- Amanda Ozin – ERLN-TB Project Manager
- Andreas Sandgren – Project scientist
- Emma Huitric – Project scientist
- Csaba Ködmön – Project scientist

Contact: tuberculosis@ecdc.europa.eu