



EULabCap country profile

CZECH REPUBLIC

Report on 2016 data
Version 1, 19 December 2017

Executive summary for Czech Republic

What are the key questions of EULabCap survey?

Does the EU/EEA public health microbiology system possess the critical capabilities and adequate level of core capacity to provide timely and reliable information on pathogen detection and characterisation for effective infectious disease prevention, alert and control at Member State and EU/EEA level and how does it progress over time?

How well was your country performing in 2016?

Overall, Czech Republic provided data for 100% of the indicators. With an overall **EULabCap index of 8.2/10** in 2016, as compared with 7.3 to 8.4 in 2013-15, data provided by the Czech Republic indicated a high and improving level of capability/capacity for their public health microbiology system.

On the positive side: Czech Republic showed a high overall performance, as compared with other EU/EEA countries, indicated by scores in the top quartile for the majority of the indicators. Top performance was achieved for implementation of EU standards for antimicrobial susceptibility testing and regulation of National Reference Laboratories. High performance was found for the regulation and guidance for diagnostic testing. For all key diseases surveyed, diagnostic testing guidelines were available at the national level and their clinical use was monitored except for antenatal screening of congenital infections and for diagnostic of *Clostridium difficile* infection. There was very good provision of reference diagnostic confirmation services, antimicrobial resistance monitoring and strong networking capacity for laboratory-based surveillance at national level and improving participation in EU disease networks. National Reference Laboratories participation to outbreak response also showed high performance.

For attention: Diagnostic testing utilisation rates decreased for some diseases in 2016. Laboratory preparedness for emerging resistance colistin-resistance appears limited.

Results

Figure 1 shows the 2016 survey scores for Czech Republic (in red) and the EU/EEA interquartile range (IQR, in grey) for each of the 12 targets within the three EULabCap dimensions.

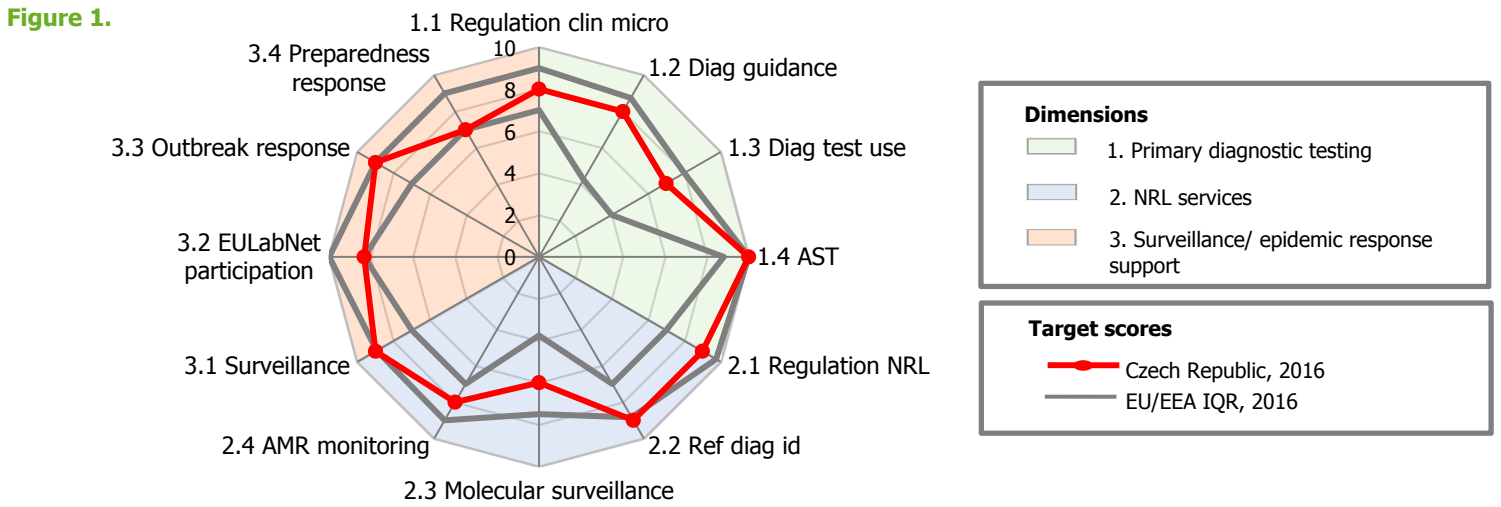


Figure 2 shows the yearly EULabCap median index scores for Czech Republic and the interquartile range of EU/EEA scores by target, 2013-2016.

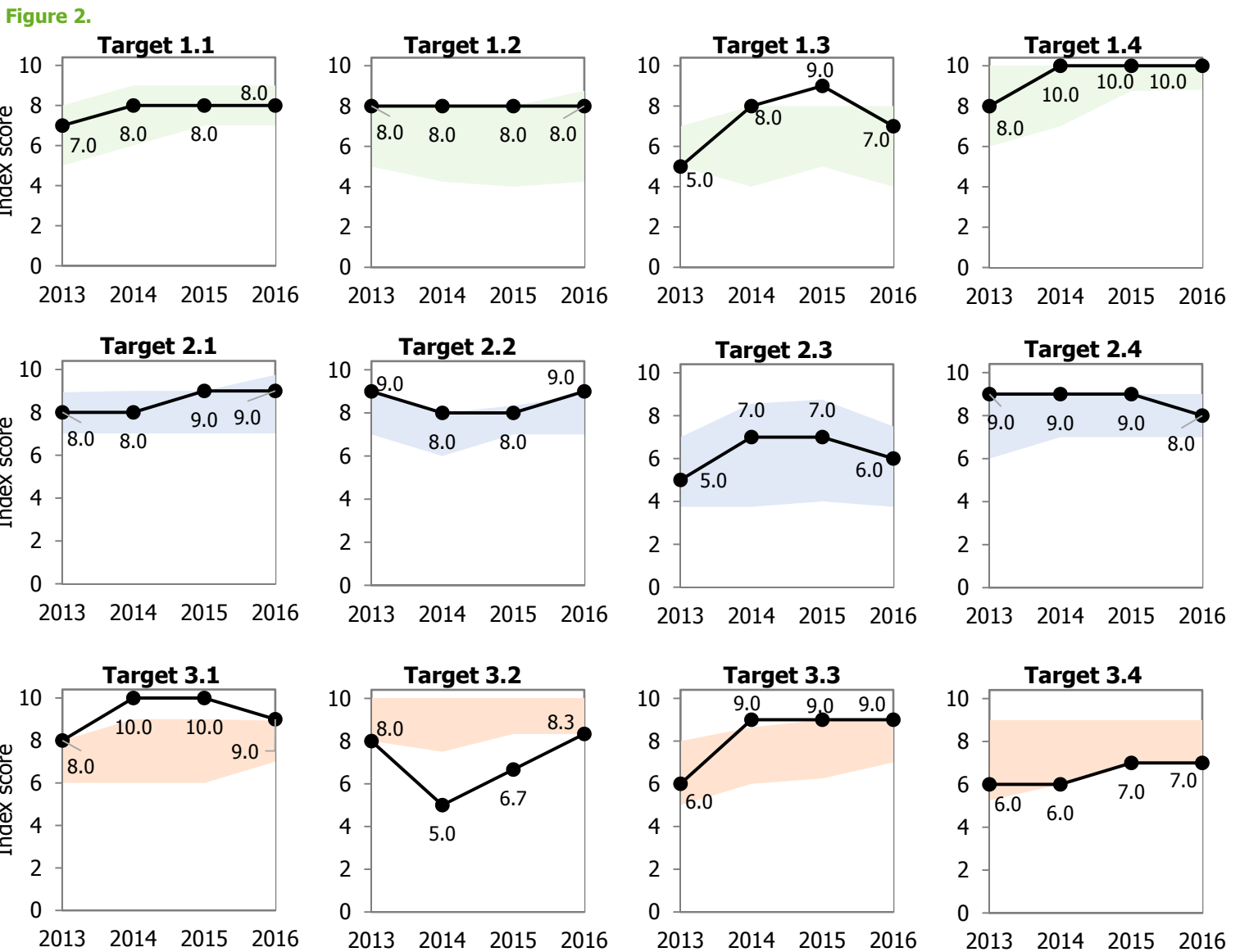


Figure 3 shows: left, the EULabCap indicator scores (range from 0-2) for Czech Republic from 2013-2016, and right, the 2016 indicator score distribution for EU/EEA countries.



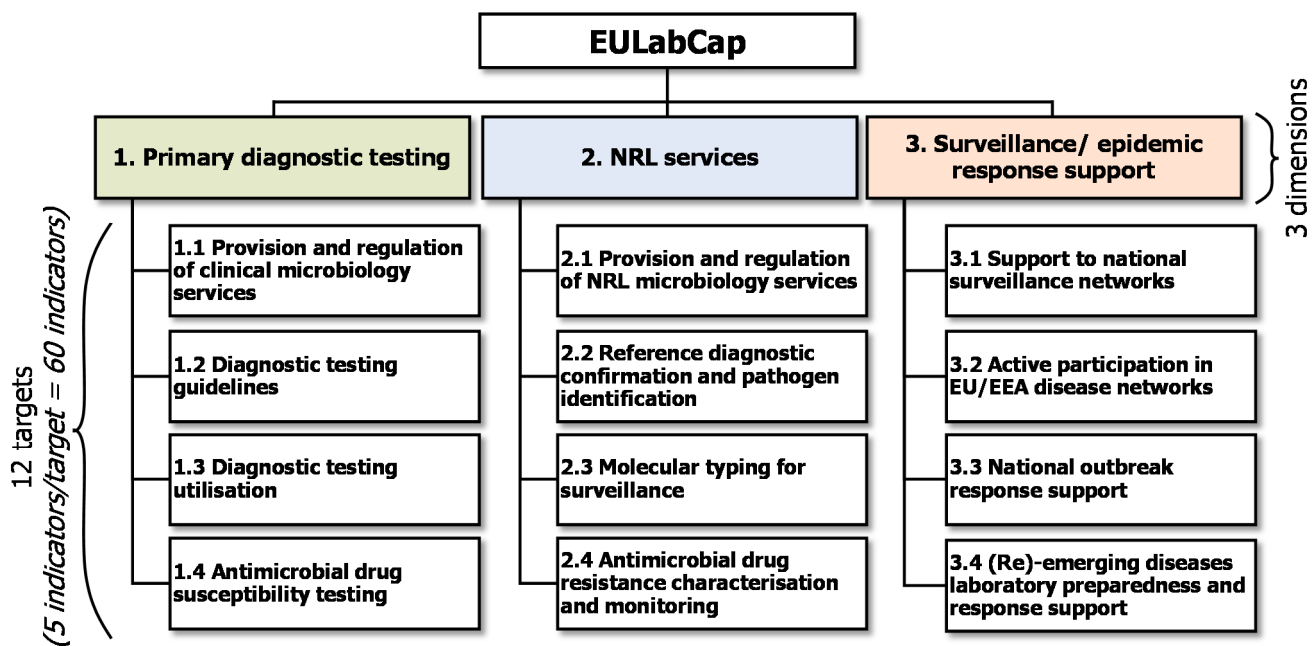
* Indicator replaced in 2016 (score not comparable with previous years).

What is the purpose of the EULabCap monitoring system? To monitor key public health microbiology capabilities and capacity for surveillance and epidemic preparedness. ECDC in close collaboration with the National Microbiology Focal Points (NMFP) and the Advisory Forum, has developed the EULabCap system. The EULabCap EU/EEA and the EULabCap country profile reports (provided to NMFP for national dissemination) aim to help policymakers identifying possible areas for action.

What is this EULabCap country profile report about? It compares the 2016 indicator scores of your country with those in previous surveys in comparison to all EU/EEA countries. The main areas with low 2016 scores, or score changes over the years, are identified to inform national authorities about areas requiring attention, and/or on the possible impact of capacity strengthening actions and health system reforms.

EULabCap survey tool methodology. This monitoring tool combines 60 technical indicators grouped into 12 targets, distributed across the following three public health microbiology system dimensions: primary diagnostic testing, national microbiology reference laboratory (NRL) services and laboratory-based surveillance and epidemic response support (Figure 4).

Figure 4.



Data collection. A mixed method was used for data collection and scoring: (a) information for 20 indicators was retrieved by ECDC from data sets accessible in The European Surveillance System (TESSy) and EU disease network reports; (b) NMFP used a questionnaire to collect information from their country for the remaining 40 indicators. Data underwent a round of validation by the NMFP.

Scoring system. Each indicator was scored at three levels: low (0, "No or limited capability/capacity"), intermediate (1, "Partial capability/ capacity", e.g. below the EU target, or partial compliance) and high (2, "Complete capability/ capacity", e.g. EU target reached, or high compliance). Indicators were not scored for which data were not available or not applicable (NA) to the country.

Data analysis and interpretation. Aggregated EULabCap indices were calculated for each target and dimension as the mean of component indicator scores, converting index values on a scale of 0–10. Overall EULabCap system indices per country were graded qualitatively at three performance levels: low (0-5.9), intermediate (6.0-7.9) and high (8.0-10). Data completeness was calculated as a percentage of missing data (NA) for each indicator per country. As NA values were not included in the calculation of the target index, the performance estimates for these targets can be biased towards either under-, or over-estimation of performance. Trends over time should be carefully interpreted for indicators that have been revised over time (indicated with * in Figure 3).

For more information:

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