About EVD-LabNet
EVD-LabNet is a multi-disciplinary network of expert laboratories. Its aim is to strengthen Europe’s laboratory capacity and capability to respond to emerging, re-emerging and vector-borne viral disease threats. The network laboratories are located in the EU/EEA and EU candidate countries. These laboratories have a strong basic and/or translation research competence in virology and human (reference) diagnostics and/or experience in diagnostic test development for viral pathogens. The network is a continuation of ENIVD that was founded about 30 years ago and that is known since 2016 as EVD-LabNet.

Emerging alphaviruses, course
From 28 March to 30 March 2022, EVD-LabNet organized an online course on emerging alphaviruses. The course was chaired by Prof. Anna Papa, Aristotle University of Thessaloniki, Greece and Prof. Luisa Barzon, University of Padova, Italy. The aim of the course was to address all aspects of alphaviruses, including basic biology, pathogenesis, and ecology of emerging alphaviruses, as well as the clinical symptoms, and epidemiology of the related diseases following the One-Health approach. Special attention was given on the laboratory and differential diagnosis, and the surveillance programs, and outbreak response strategies followed by European countries affected by chikungunya virus as an example of alphavirus infections emerging in Europe due to importation through travel. The course was accredited by the European Accreditation Council for Continuing Medical Education (EACCME®). The course was attended by 17 participants from reference laboratories in 16 European countries. The training staff consisted of 16 lecturers from 8 European countries, who were selected based on their experience and expertise on the course topic. Course materials including literature and presentations were made available to the participants.

Monkepox virus outbreak response
In immediate response to the multi-country outbreak with monkeypox virus, EVD-LabNet has mapped and update the current capacities of members for the detection of monkeypox virus and orthopox viruses in general. The EVD-LabNet directory (EVD-LabNet directory (europa.eu)) is updated real-time as more laboratories implement diagnostics. The network has shared protocols and was informed about the availability of reference materials (Monkeypox virus and other Orthopoxviruses collection | EVAg (european-virus-archive.com)). Member laboratories that can support other laboratories with primary and confirmatory testing were inventoried and links for such support were established (https://www.ecdc.europa.eu/en/about-us/partnerships-and-networks/disease-and-laboratory-networks/evd-labnet). In 2019 EVD-LabNet conducted an EQA for molecular detection of orthopox viruses. The draft report with data and suggestions for diagnostics was shared immediately with the members to support capacity and capability building in response to the current outbreak.
External Quality Assessment of rodent-borne virus detection and alphavirus detection
At the end of 2021 EVD-LabNet organised an external quality assessment (EQA) on the molecular and serological detection of rodent-borne viruses, including orthohantavirus and the mammarenavirus lymphocytic choriomeningitis virus. The organization of the EQA was a strong collaboration between several EVD-LabNet institutes including the University of Helsinki, RKI, RIVM, University of Ljubljana, Aix Marseille University and the European Virus Archive (EVAg, EVAg | European Virus Archive - GLOBAL (european-virus-archive.com)). The serology part had 20 participants from 14 EU/EEA and 3 EU-enlargement countries. The molecular part had 16 participants from 12 EU/EEA countries. The individual results of the EQA in the context of the anonymised total of the results have been reported back to the participants and a general report is being prepared. The EQA will be followed by a short survey on implemented corrective action in participant labs based on the EQA results.

In spring 2022 EVD-LabNet organised an EQA on the molecular detection of emerging alphaviruses. The submitted results are currently being analysed for individual feedback to the participants.

Suggestions for upcoming EQAs are welcome.

Scientific Advisory Board
On 23 March 2022, the EVD-LabNet Scientific Advisory Board (SAB) had its second meeting. The network coordinator presented the status of the activities planned in the first two specific contract. Results of the rodent-borne EQA were discussed as well as topics for future network activities. The composition of the SAB can be found on the EVD-LabNet webpage.

Fact sheets
EVD-LabNet members have worked on four fact sheets. The fact sheet on Crimean Congo Haemorrhagic fever was written by Prof. Anna Papa from Greece and has been published on the ECDC website, Factsheet about Crimean-Congo haemorrhagic fever (europa.eu). The factsheet on Marburg virus was written by Dr. Tatjana Vilibić-Čavlek from the Institute of Public Health in Zagreb, Croatia and has been published as well, Factsheet about Marburg virus disease (europa.eu). Factsheets on Toscana virus and Nipah virus are currently in progress.

Upcoming activities.

- Factsheets on Toscana virus, Nipah virus to be published on ECDC website in summer 2022.
- 2022, systematic review on value of urine as sample for flavivirus diagnostics.
- 2023, 6th Annual EVD-LabNet meeting. Dates, location and registration to be announced.

For more information please contact at: EVD-LabNet@RIVM.nl