World Health Organization
REGIONAL OFFICE FOR Europe

REPORT ON PREPARATORY WORKSHOP FOR ESTABLISHMENT OF THE EUROPEAN REGIONAL LABORATORY TASK FORCE FOR HIGH THREAT PATHOGENS (LAB TASK FORCE)

Istanbul, Turkey

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List of abbreviations

BLBH	Better Labs for Better Health, BetterLabs
CCHF	Crimean–Congo haemorrhagic fever
ECDC	European Centre for Disease Prevention and Control
EDPLN	Emerging and Dangerous Pathogens Laboratory Network
EMERGE	Efficient response to highly dangerous and emerging pathogens at EU level
EQA	External quality assurance
EU	European Union
EVD	Emerging viral diseases
EVD-LabNet	Emerging Viral Diseases – Expert Laboratory Network
EWRS	Early Warning and Response System
FAO	Food and Agriculture Organization of the United Nations
FIND	Foundation for Innovative Diagnostics
GLAD HP	Global Laboratories Alliance for the Diagnosis of High Threat Pathogens
IHM	Infectious Hazards Management
IHR	International Health Regulations (2005)
ISO	International Organization for Standardization
LIMS	Laboratory information management system
MERS-CoV	Middle East respiratory syndrome-related coronavirus
MoH	Ministry of Health
MoU	Memorandum of understanding
MTA	Material transfer agreement
NIBSC	National Institute for Biological Standards and Control
NLWG	National laboratory working group
NMFP	National microbiology focal point
NRL	National reference laboratory
OIE	World Organization for Animal Health
PCR	Polymerase chain reaction
PH	Public health
PHL	Public health laboratory
QMS	Quality management system
RIVM	National Institute for Public Health and the Environment
SEE	South-eastern European
SECID	Southeast European Center for Surveillance and Control of Infectious Diseases
SOP	Standard operating procedure
TBEV	Tick-borne encephalitis virus
ToR	Terms of reference
WHE	WHO Health Emergencies Programme
Lab Task Force	European Regional Laboratory Task Force for High Threat Pathogens
WHO	World Health Organization
WHO-CC	WHO collaborating centre
WNV	West Nile virus

Executive summary

Under the WHO Health Emergencies initiative (WHE), the Infectious Hazards Management programme provides technical support to countries and communities to prevent and control outbreaks caused by high threat pathogens (HTPs). As part of this programme, the Better Labs for Better Health initiative (Better Labs) focuses on strengthening country core laboratory capacities, because laboratory services are key to clinical and public health responses to infectious hazards. International networks for laboratory surveillance, preparedness and response are an important tool for laboratory strengthening, because they can serve both as a platform for sharing information and expertise, and as a system for referral of diagnostic specimens for primary and confirmatory testing. Among the WHE priority countries in the WHO European Region[1], a number do not participate in international laboratory preparedness and response networks for HTPs, which represents a key gap. To address this gap, WHO Regional Office for Europe is establishing the European Regional Laboratory Task Force for High Threat Pathogens (Lab Task Force).

To establish the Lab Task Force, a preparatory meeting was held in Istanbul in January 2019 to discuss the Terms of Reference (ToR) for the Lab Task Force and associated partners; to establish a laboratory capacity and capability reviewing tool; to discuss the need and establishment of External Quality Assessments (EQA) for prioritized HTPs; and to discuss the networking activities of the Lab Task Force.

Participants at the meeting included 19 experts in HTP diagnostics from 14 WHE priority countries in the European Region. In addition, representatives of six WHO collaborating centres (WHO-CC), the Global Laboratories Alliance for the Diagnosis of High Threat Pathogens (GLAD HP) and three international laboratory networks were present.

Network and WHO-CC representatives presented the objectives and activities of their network or centre to facilitate the identification of common grounds for supporting activities within the Lab Task Force and to facilitate networking between country representatives and the existing laboratory networks. Draft ToR for Lab Task Force members, high threat pathogen Laboratory Focal Points and the Task Force Secretariat were discussed, and revised ToR were defined based on the feedback.

The meeting also identified a list of priority HTPs for the Lab Task Force to support in the WHE priority countries, i.e. through the organization of EQAs. Prioritized HTPs were orthohanta viruses, flavi viruses, Crimean–Congo haemorrhagic fever (CCHF), Brucella spp., Leptospira spp., Coxiella burnetti, Francisella tularensis, Bacillus anthracis, and Mycobacterium tuberculosis.

Barriers to participation in EQA schemes were identified and involved funding issues, legislative issues with regard to importing panels, the absence of reference materials and the need for follow-up on EQA results through support of corrective actions. Proposed solutions included advocacy to increase awareness for the importance of EQAs among policy makers and institute leadership.

A tool under to assess the HTP preparedness and response capacities and capabilities for use in the Lab Task Force countries already under development was reviewed during the meeting and feedback was collected to revise the tool.

Finally, the position of the Lab Task Force in the current laboratory preparedness and response landscape was discussed to safeguard synergies and avoid duplication in activities.

[1] WHE priority countries in the European Region: Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, North Macedonia, Republic of Moldova, Serbia, Tajikistan, Turkey, Ukraine and Uzbekistan.

The Lab Task Force preparatory workshop revealed a great willingness among countries and international partners to move forward in laboratory preparedness and response to HTPs through Regional collaboration. The workshop addressed the need for high level political recognition of the importance of laboratory strengthening; for ToR-based networking; for internet work collaboration in the field of laboratory preparedness and response; for improved legislation around specimen shipments; and for country specific assessment of capacities and capabilities. As immediate next steps the ToR will be finalized; the assessment tool to assess the HTP preparedness and response capacities and capabilities will be completed; the possibilities for on-site assessments will be explored; and an information sharing platform for members will be established.

Background

In 2012, the WHO Regional Office for Europe launched the Better Labs for Better Health (Better Labs) initiative that focuses on strengthening the country core laboratory capacities required under the International Health Regulations (2005) (IHR). Laboratory services are essential for a country's security as they are key to infectious hazard detection and characterization; risk-assessment; clinical and public health responses; notification; monitoring of risk-management effectiveness; and general monitoring of infectious hazards to public health. Strengthening of these core laboratory capacities includes strengthening national public health laboratories in the area of preparedness and response to HTPs, and supporting the development and implementation of strategies for the control and prevention of HTPs (including those requiring a "One Health approach").

International networks for laboratory surveillance, preparedness and response represent an important platform for sharing information and expertise, as well as a system for referral of diagnostic specimens for primary and confirmatory testing, including typing. The establishment of international collaborative networks of public health laboratories is therefore an essential step towards achievement of IHR compliance.

Under the WHE-programme, WHO coordinates and supports multiple (laboratory) response networks including the Emerging and Dangerous Pathogens Laboratory Network (EDPLN)[2], the Global Outbreak Alert and Response Network (GOARN)[3], the Global Laboratories Alliance for the Diagnosis of High Threat Pathogens (GLAD HP), the Global Influenza Surveillance and Response System (GISRS)[4], and the network of WHO collaborating centres (WHO-CC). In addition, there are WHO Regional networks such as the European Tuberculosis Laboratory Initiative (ELI)[5] and the European Measles and Rubella Laboratory Network[5], while the European Union (EU) supports laboratory preparedness and response networks such as the Emerging Viral Diseases – Expert Laboratory Network (EVD-LabNet)[6], Efficient response to highly dangerous and emerging pathogens at EU level (EMERGE)[7] and the One Health Network for the Prevention of Vector-Borne Diseases around the Mediterranean and Sahel Regions (MediLabSecure)[8], all of whom the WHO Regional Office for Europe collaborates with closely.

However, not all WHE priority countries in the WHO European region are currently covered by networks specifically for laboratory preparedness and response to HTPs. The absence of these countries in international laboratory networks for HTPs represents a key gap. To address this gap, the WHO Regional Office for Europe is establishing the Laboratory Task Force for High Threat Pathogens (Lab Task Force). The establishment of the Lab Task Force is part of the work of the WHE programme addressing Area 3 of the Better Labs initiative[9] and will support the implementation of the action plan to improve public health preparedness and response in the WHO European Region, as per Resolution EUR/RC68/R7 of the 68th session of the Regional Committee for Europe (RC68) held in September 2018 (2) and GPW13 (3).

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[2] EDPLN: https://www.who.int/csr/bioriskreduction/laboratorynetwork/en/.
[3] GOARN: https://www.who.int/ihr/alert_and_response/outbreak-network/en/
[4] GISRS: https://www.who.int/influenza/gisrs_laboratory/en/
[5] Regional laboratory networks: http://www.euro.who.int/en/health-topics/Health-systems/laboratory-services/disease-specific-laboratory-services
[6] EVD-LabNet: https://www.evd-labnet.eu/.
[7] EMERGE: https://www.emerge.rki.eu/ .
[8] MediLabSecure: http://www.medilabsecure.com/
[9] See Better Labs for Better Health – strengthening laboratory systems in the WHO European Region. Progress report 2016–2017 - http://www.euro.who.int/en/health-topics/Health-systems/laboratory-services/publications/better-labs-for-better-health-strengthening-laboratory-systems-in-the-who-european-region-2018

As a step towards this goal, a preparatory meeting was organized in November 2017 with a special focus on countries in the south-eastern European (SEE) region (4). Building further on the outcomes of this meeting and in preparation of the establishment of the Lab Task Force, a workshop was organized for representatives from WHE priority countries in the WHO European Region, from existing European laboratory networks and from relevant WHO-CC to discuss the way forward and to identify gaps and needs for a successful improvement of the WHE priority countries' laboratory preparedness and response to HTPs.

The list of participating organizations, the list of participants and the agenda can be found in Annex 1, Annex 2 and Annex 3 respectively.

Objectives of the meeting

Specifically, the objectives of the meeting were to:

- Discuss Terms of Reference for the Lab Task Force, high threat pathogens laboratory focal points, partner institutions and the Lab Task Force Secretariat.
- Discuss the needs for and establishment of External Quality Assessment for HTPs, including discussion on priority HTPs relevant to WHE priority countries.
- Establish (review and agree on) a tool to identify gaps and needs in WHE priority countries' laboratories capacities and capabilities to prepare for and respond to priority HTPs.
- Identify actions that could be taken to improve country laboratories to prepare for and respond to priority HTPs.
- Discuss networking activities within the Lab Task Force to ensure the task force achieves its goals.
- Discuss activities of existing international laboratory networks and WHO-CC in the area of HTPs to enable liaison with those networks for the Lab Task Force to achieve its goals.

Activities of international laboratory networks and WHO-CC

The WHO Regional Office for Europe works closely with partners in the EU and other countries to support laboratory networks for managing HTPs in the WHO European Region. These include the collaborative network of WHO-CC, the GLAD HP, the European Centre for Disease Prevention and Control (ECDC) funded EVD-LabNet, and the EU-funded EMERGE laboratory network focused on RG3 bacteria and RG4 viruses. Representatives of these networks were invited to the workshop to present the objectives and activities of their networks or WHO-CC, to identify common grounds for supporting activities within the Lab Task Force and to facilitate networking between the country representatives and the existing laboratory networks. The following networks and WHO-CC were present:

EDPLN. The WHO Emerging and Dangerous Pathogens Laboratory Network (EDPLN), is made up of global and regional EDPLN networks of high security human and veterinary diagnostic laboratories. EDPLN contributes to outbreak response and preparedness as well as rapid development of diagnostic assays for emerging and infectious pathogens globally. It is a network of high security diagnostic laboratories able and willing to collaborate and share their knowledge, biological

materials and experimental research results in a real time framework to detect, diagnose and control novel disease threats. EDPLN is coordinated with the Global Outbreak Alert and Response Network (GOARN) for laboratory preparedness and response.

GLAD HP. The Global Laboratories Alliance for the Diagnosis of High Threat Pathogens (GLAD HP) is part of IHM in the WHE programme at WHO. WHO aims to improve response to outbreaks and emergencies through the international coordination of partners to contain outbreaks and to strengthen national capacity to manage health emergency risks. GLAD HP is being developed to improve laboratory networking in order to reduce the international spread of HTP disease and to improve rapid diagnostics to outbreaks with HTPs. It aims to strengthen national capacities to maintain domestic laboratory capacities through a) development of mutual benefit, customized sample and data sharing mechanisms including international shipping mechanisms, b) establishment of priorities for sample utilization, c) fostering the integration of research into outbreak response, d) establishment of rules for membership in WHO lab networks (quality, ethics) and e) establishment of criteria for BSL4 laboratory construction and management.

EVD-LabNet. The ECDC-funded Emerging Viral Diseases - Expert Laboratory Network (EVD-LabNet) covers 69 institutes in 37 European countries, including all 30 EU/EEA countries with diagnostic capacities and all 7 pre-accession countries. It currently includes five WHE programme priority countries in the WHO European Region, i.e. Albania, Bosnia & Herzegovina, North Macedonia, Serbia and Turkey. The network is coordinated from the Erasmus Medical Centre, Rotterdam, the Netherlands and is associated with the Emerging and Vector-borne Diseases Programme at ECDC. A prerequisite for identification, surveillance, assessment and communication of current and emerging infectious disease threats to Public Health is the availability of a reliable capability and sufficient capacity of diagnostic and reference laboratory service. To facilitate this, EVD-LabNet supports networking, external quality assessments and training of laboratories involved in these activities. EVD-LabNet creates and maintains a (pro)-active and flexible network of European expert laboratories that are involved in patient diagnostics, and that support Public Health activities in liaison with research activities of (re)emerging viral diseases. The network focuses on virus families and genera that are rare, imported and (re)emerging in EU/EEA countries.

SECID. The Southeast European Center for Surveillance and Control of Infectious Diseases (SECID) focuses on the following countries and areas: Albania, Bosnia & Herzegovina, Bulgaria, Croatia, Israel, North Macedonia, Republic of Moldova, Montenegro, Romania and Serbia, as well as Kosovo[*], thereby including five Regional WHE programme priority countries. SECID's mission is to develop and support actions that have practical applications to improve the surveillance and response to control infectious diseases in the countries of south east Europe and Israel and work with interested countries or networks to strengthen security in the region. Examples of activities for capacity and capability building are mentorships, expert group meetings, stimulation of EQA participation, and sharing standard operating procedures (SOP) for diagnostics, biosafety and biosecurity.

WHO-CC. WHO operates a network of WHO collaborating centres. These are institutions such as research institutes and parts of universities or academies that are designated by WHO to carry out activities in support of WHO's programmes. There are currently over 800 WHO-CC in more than 80

[*] For the purposes of this publication, all references to "Kosovo" should be understood/read as "Kosovo (in accordance with Security Council resolution 1244 (1999))".

countries. WHO-CC in the WHO European Region with areas of work related to the Lab Task Force were identified and invited to present their activities. Of these, the following WHO-CC were represented at the workshop:

- WHO-CC for Emerging Infections and Biological Threats at Robert Koch Institute (RKI), Berlin, Germany.
- WHO-CC for Clinical Care, Diagnosis, Response and Training on Highly Infectious Diseases at the National Institute for Infectious Diseases "L. Spallanzani" (INMI), Rome, Italy.
- WHO-CC for Arbovirus and Haemorrhagic Fever Reference and Research at Erasmus Medical Centre (EMC), Rotterdam, the Netherlands.
- WHO-CC for Virus Reference & Research (Special Pathogens) at Public Health England, Porton Down, United Kingdom.
- WHO-CC for Reference and Research on Brucellosis at the Animal and Plant Health Agency (APHA), Addlestone, United Kingdom.
- WHO-CC for the Characterization of Rabies and Rabies-related Viruses, Friedrich-Loeffler Institut (FLI), Federal Institute for Animal Health, Insel Riems, Germany.

Shaping the laboratory task-force: Terms of Reference

To ensure the Lab Task Force's adequate functioning, the network members and their functions and roles need to be defined and agreed upon. The Lab Task Force will serve as a network responsible for linking expertise with regard to the management of HTPs from WHO-CC and existing laboratory networks to WHE priority countries and regions in the European region. The working group will function as a support group for WHO and its partners. The work of the task force will be conducted by high threat pathogens laboratory focal points that will be formally nominated by the countries, together with experts from partner organizations, international laboratory networks, WHO-CC and other relevant experts. The WHO Regional Office for Europe will function as the Lab Task Force's Secretariat.

In this context, an important step towards the launch of the laboratory task force is to define the different partners in the network and to establish the Terms of Reference (ToR). To establish the Lab Task Force's ToR, the Secretariat presented a first draft of ToR for a) Lab Task Force members, b) laboratory focal points and c) the Lab Task Force Secretariat at the meeting. There will be no ToR either for WHO-CC (who already have their own separate ToR with WHO) or for other laboratory preparedness and response networks. The latter will contribute in line with their capacities. The ToR were discussed in six groups and each group gave feedback to be addressed by the Lab Task Force Secretariat[10].

[10] The finalized terms of reference are available at http://www.euro.who.int/__data/assets/pdf_file/0017/404270/Lab-task-force-ToR_eng.pdf

Prioritizing high threat pathogens relevant to WHO Europe WHE-priority countries and regions for preparedness and response support.

The WHO WHE-programme focuses on pathogens that pose a high public health risk because of their epidemic potential and because there are no, or insufficient, interventions. These include the pathogens of global significance mentioned in Annex 2 of the IHR (2005) (5), as well as pathogens prioritized by the WHO Research and Development Blueprint (6). This list includes infectious diseases such as Lassa Fever, Ebola, CCHF and Middle East respiratory syndrome-related coronavirus (MERS-CoV) that pose a public health risk because of their epidemic potential and for which there are no, or insufficient, countermeasures and that are not covered by other WHO programmes. However, although global prioritization lists for HTPs exist from both public health and biosecurity perspectives, the prioritization of HTPs might differ at the European Regional and individual country levels. In preparation for fine-tuning the HTP prioritization for the WHO European Region, the Regional Office is currently reviewing 10 years of national data on infectious disease threats to make a prioritization short-list to be discussed with the Lab Task Force countries. In addition, a priority list was established for the SEE region in a preparatory meeting held in Sofia, Bulgaria, in October 2018 (4); this included CCHF, orthohanta viruses, West Nile virus (WNV) and Tick-borne encephalitis virus (TBEV) for the category viruses and Franciscella tularensis, Brucella, Anthrax, Leptospira and Coxiella for the category bacteria.

To further tailor its support to country members of the Lab Task Force in the area of preparedness and response to HTPs, meeting participants were asked to identify HTPs they considered to be the top priority for task force support in their countries. They were asked to address this question in the light of support by the task force through EQAs focussing on the prioritized HTP. EQAs are a widely accepted and excellent tool to address capacity and capability building in laboratories (7). The participants were asked to identify the most urgent EQA needs, both pathogen and execution wise.

The pathogens listed in Table 1 were identified in the meeting as in urgent need of laboratory preparedness and response support through EQAs. Participants indicated that EQA focus should first be on the more common pathogens of importance to their countries instead of the rarer ones. Target pathogens in EQAs organized by existing laboratory networks are not always a priority in task force countries, and countries would therefore appreciate task force support in capacity and capability building for detection of pathogens that have a high infection burden in their countries. Furthermore, multiple barriers to and concerns regarding participation in EQA schemes were identified:

- Funding to participate in the EQA schemes. This related to both procurement and purchase of reagents as well as staffing. Securing appropriate funding was indicated to be related to increasing awareness among country policy makers, e.g. in the context of countries currently developing health security plans. WHO advocacy at policy maker and institutional levels was mentioned as desirable. At the same time it was put forward that it is, however, important to realize that procedures leading to a good EQA outcome are part of a larger country health system. Good EQA results generated in a low quality country system could lead to a false

sense of security. Finally, it was suggested that WHO could provide funding or necessary reagents to participate in EQA schemes.

- Local legislation on importing EQA materials. Receipt of EQA panels can require months of preparation to obtain permission for import and storage.
- Absence of reference materials, i.e. reference strains, internal standards for meaningful participation. Access to those materials would improve laboratory capabilities.
- Need for follow-up on outcomes of EQA performance. Countries need support with follow up measures for capability building. The laboratory task force could provide SOPs and guidance for kit procurements. In addition, EQA schemes could support monitoring effectiveness of corrective actions.

Table 1: Priority HTPs identified during workshop

Bacteria	**Viruses**
Franciscella tularensis	Orthohanta viruses
Coxiella burnetti	Crimean-Congo Haemorrhagic fever virus
Borrelia burgdorferi	Flavi viruses (a.o. West Nile virus, tick-borne encephalitis virus)
Baccilus anthracis	
Mycobacterium tuberculosis	
Leptospira spp.	
Brucella spp.	

Assessment of national capacity needs

Well-functioning, robust and sustainable laboratory services, operating according to international principles of quality and safety are an essential part of strong health systems and are crucial to improving Public Health. To support laboratory capacity and capability building in WHE priority countries to prepare for and respond to HTPs, national gaps and needs in laboratory preparedness and response should be identified. For this purpose, an online questionnaire on HTP laboratory preparedness and response capacities and capabilities is being developed for use by the countries. The on-line tool will be pathogen-based and will provide an in-depth analysis of national laboratories' expertise regarding HTP diagnostic capacities, capabilities, quality assurance and (inter) national laboratory network involvement; this will in turn help identify existing gaps and needs. Outcomes of the questionnaire will provide a basis for the development of country-specific action plans, including EQA needs.

To reach consensus on the contents of the national capacities assessment tool, draft questionnaires were distributed among the meeting participants for feedback. Questionnaires targeting different HTPs were distributed for comments and feedback was discussed in a plenary session. Meeting participants were additionally invited to share their individual comments on the assessment tool after the meeting by e-mail to the IHM group at the WHO Regional Office for Europe.

Besides the contents of the assessment tool, the process for conducting the actual assessment was discussed at the meeting. Discussion focused on who will coordinate the assessments at the national level and synthesize the data towards one country-specific overview of strengths, gaps and needs. It

is envisaged that the high threat pathogens laboratory focal point will play an important role in the assessment. This requirement will be part of the nomination procedure for high threat pathogens laboratory focal points and included in their ToR, as well as those of the Lab Task Force.

Laboratory task force establishment in the laboratory preparedness and response landscape

International networks for laboratory surveillance, preparedness and response represent both an important platform to support capacity and capability building, and a system for referral of diagnostic specimens for primary and confirmatory testing. Establishing international collaborative networks of public health laboratories is therefore an essential step towards achieving IHR compliance. The fact that numerous such networks exist reflects the importance of networking as a preparedness and response tool. It is however essential that in this mushrooming landscape of networks, synergies are developed and overlap is avoided. The Lab Task Force will therefore need to coordinate and interact with existing networks. Furthermore, the task force has to be shaped in such a way that it serves as a platform for (inter)national collaborations. Networking within the task force can be ensured through different activities, i.e. twinning partnerships, training, decision trees for referral of samples, memoranda of understanding between partners, material transfer agreements, , etc.

Participants to the meeting were asked to define strategies and activities for shaping networking within and outside the Lab Task Force. The following focus points for further discussions came forward:

- Networking activities should align with the legal framework in which the national laboratories work. An official memorandum of understanding (MoU)/ToR will ensure this and should include the Ministry of Health (MoH), because multiple agreements already exist between WHO and national authorities (MoH).
- There is a need for an inventory of (inter) national laboratories/preparedness activities and institutes that are relevant for diagnosis and surveillance of the defined HTPs. This list is established ideally from a One-Health approach (i.e. includes veterinary laboratories, laboratories of food safety authorities). This inventory should include institute, target pathogens, type of tests, , etc. This inventory will facilitate targeted networking activities. For each specific country this could be done through the to be appointed National Microbiology Focal Points (NMFPs).
- Network shaping should ideally include bilateral agreements between laboratories for reference testing. WHO could mediate in establishing bilateral connections (especially needed), because there are no official EU reference laboratories for human diagnostics and no WHO-CC for some HTPs.
- Networking activities are preferred to include the European Virus Archive, National Institute for Biological Standards and Control (NIBSC), ECDC/EVD-LabNet, Food and Agriculture Organization of the United Nations (FAO).
- An in-depth country needs (training, capacity and capability) assessment based on a pre-defined list of minimal in-country requirements and performed by WHO Regional Office for Europe , WHO country office and the designated high threat pathogens laboratory focal

points should be the basis for identifying networking needs. It was considered crucial to first identify the needs that will subsequently shape networking activities and identify possible twinning partnerships among task forces.

- Sharing of reference materials and shipments of EQA panels are an important part of capacity and capability activities that can be supported by the Lab Task Force. Both the implementation of the Nagoya protocol[11] and international shipment regulations concerning biosecurity are main barriers to achieve these activities. WHO headquarters is addressing these issues at high level.
- Training as part of capacity and capability building with the Lab Task Force: numerous training tools already exist. It might be worthwhile investing in translation into Russian.
- Clear criteria for involvement of various Lab Task Force partners is needed. Why are certain specific WHO-CC, lab preparedness response networks, EU infrastructures involved?
- There is an urgent need for the announced communication platform, because this will facilitate networking and capacity/capability building through networking (e.g. on-line discussion platform, protocols, useful links, training materials, etc.)
- There is a need for countries and international organizations to include the laboratory community in existing alert systems. Communication systems exist (IHR, the EU's Early Warning and Response System (EWRS)[12], but these do not reach communities of national reference laboratories.

Conclusions and next steps

The preparatory workshop for establishment of the Laboratory Task Force for High Threat Pathogens (Lab Task Force) in WHE priority countries and regions in Europe revealed a great willingness among countries and international partners to move forward in laboratory preparedness and response to HTPs through collaboration in the European Region. The meeting provided a fruitful platform to discuss the way forward to establish the Lab Task Force and to discuss tools to identify gaps and needs for successful improvement of the WHE priority countries' laboratory preparedness and response to HTPs.

In recognition of the crucial role of networking and internetwork collaborations, representatives of WHO-CC and related laboratory preparedness and response networks were present. Building on the basic principle that duplication in activities should be avoided, the scope of their activities was presented and provided input to identify common grounds for specific support. It was agreed that such supporting activities within the Lab Task Force should be based on structured, in-depth analysis of country specific situations. Tools to assess a country's specific needs to increase laboratory capacity and capability for HTPs were therefore reviewed and discussed during the meeting to provide input for tool improvement.

To ensure adequate functioning of the Lab Task Force, the network members and their functions and roles were defined in draft ToR that were provided to the participants ahead of the meeting. These ToR were reviewed and discussed at the meeting and revised according to the provided input.

[11] https://www.who.int/influenza/pip/NagoyaProtocolandPH_EN_20Mar2018.pdf
[12] https://ecdc.europa.eu/en/publications-data/early-warning-and-response-system-european-union-ewrs

Following up on an earlier recognized need for training, workshops and EQAs to improve laboratory preparedness and response to HTPs; the implementation of EQA schemes as part of Lab Task Force activities was discussed. This resulted in a list of priority topics; as well as the identification of barriers for proper scheme implementation such as lack of funding for participation, complex legislation for shipment and receipt of biological materials, and the absence of proper controls and tests. Raising awareness for these barriers and the crucial importance of EQA participation among policy makers was identified as a priority activity for the task force country members and WHO.

In conclusion, the workshop addressed the previously identified needs for high level political recognition of the importance of laboratory strengthening, for ToR-based network building, for internet work collaboration in the field of laboratory preparedness and response, for improved legislation around specimen shipment, and for country-specific assessment of capacities and capabilities. This resulted in the identification of the following immediate actions to take the establishment of the Lab Task Force further:

- The ToR for Lab Task Force members, high threat pathogens laboratory focal point and the Secretariat will be revised according to participants' input and meeting discussions. The updated ToR will be shared with the meeting participants.
- In close collaboration with the WHO country offices, national authorities (MoH) will receive an official invitation to nominate a country high threat pathogens laboratory focal point to represent the country in the Lab Task Force, thereby ensuring country commitment and a contact point to coordinate in-country Lab Task Force activities with.
- Before its implementation, the assessment tool to assess HTP preparedness and response capacities and capabilities will be adapted according to input received during the meeting and shared with the participants for a final round of input and approval.
- The possibilities for conducting on-site needs assessments will be explored. Ideally these should be performed alongside the on-line assessment in order to shape a comprehensive action plan for the Lab Task Force.
- The information sharing platform for Lab Task Force members will be finalized and launched as soon as possible as an important tool in laboratory capacity and capability building, and for supporting the Lab Task Force networking function.
- The Secretariat at the WHO Regional Office for Europe will look into possibilities for making the national reference laboratory community more familiar with/part of existing communication channels on HTPs (existing ECDC alert platforms, as part of IHR).

References

1. WHO, Seventieth World Health Assembly, April 2017. Proposed programme budget 2018-2019. http://apps.who.int/gb/ebwha/pdf_files/WHA70/A70_7-en.pdf
2. WHO, Sixty-eight Regional Committee for Europe, September 2018. Action plan to improve public health preparedness and response in the WHO European Region. http://www.euro.who.int/__data/assets/pdf_file/0006/378168/68wd14e_ActionPlanPreparedness_180516.pdf?ua=1
3. WHO, Seventy-first World Health Assembly, April 2018. Thirteenth General Programme of Work. http://apps.who.int/gb/ebwha/pdf_files/WHA71/A71_4-en.pdf?ua=1
4. WHO Regional Office for Europe, November 2017. Report on the status of laboratory networks for high threat pathogens in South-Eastern European countries. http://www.euro.who.int/__data/assets/pdf_file/0003/364116/report-htp-see-eng.pdf
5. WHO. International Health Regulations (2005). https://www.who.int/ihr/9789241596664/en/
6. WHO. Research and Development Blueprint. https://www.who.int/blueprint/about/en/
7. WHO. Laboratory Quality Management Systems. https://extranet.who.int/lqsi/sites/default/files/attachedfiles/LQMS%2010.%20Assessment%20-%20EQA.pdf

Annex 1: Organizations participating in the Lab Task Force establishment workshop Istanbul, Turkey, 30–31 January 2019

The WHO Emerging and Dangerous Pathogens Laboratory Network (EDPLN)[13].

The Global Laboratory Alliance for the Detection of High-Threat Pathogens (GLAD HP) – part of Infectious Hazard Management programme within WHO's Health Emergencies Programme.

European expert laboratory network for emerging viral diseases (EVD-LabNet)[14].

Southeast European Center for Surveillance and Control of Infectious Diseases (SECID)[15].

WHO Collaborating Centre for Emerging Infections and Biological Threats[16] at the Robert Koch Institute, Berlin, Germany.

WHO Collaborating Centre for Clinical Care, Diagnosis, Response and Training on Highly Infectious Diseases[17] at the National Institute for Infectious Diseases "L. Spallanzani" (INMI), Rome, Italy.

WHO Collaborating Centre for Arbovirus and Haemorrhagic Fever Reference and Research[18] at the Erasmus Medical Centre (EMC), Rotterdam, the Netherlands.

WHO Collaborating Centre for Virus Reference & Research (Special Pathogens)[19] at Public Health England, Porton Down, United Kingdom.

WHO Collaborating Centre for Reference and Research on Brucellosis[20] at the Animal and Plant Health Agency (APHA), Addlestone, United Kingdom.

WHO Collaborating Centre for Rabies Surveillance and Research[21], at the Friedrich-Loeffler-Institut, Griefswald, Germany.

[13] https://www.who.int/csr/bioriskreduction/laboratorynetwork/en/
[14] https://ecdc.europa.eu/en/about-us/partnerships-and-networks/disease-and-laboratory-networks/evd-labnet
[15] http://www.secids.com/
[16] http://apps.who.int/whocc/Detail.aspx?cc_ref=DEU-135&cc_subject=infection%20control&
[17] http://apps.who.int/whocc/Detail.aspx?cc_ref=ITA-89&responsible_officer=barbeschi&
[18] http://apps.who.int/whocc/Detail.aspx?cc_ref=KEN-5&cc_code=ken
[19] http://apps.who.int/whocc/Detail.aspx?cc_ref=UNK-122&institution_full_name=public%20health%20england&
[20] http://apps.who.int/whocc/Detail.aspx?cc_ref=UNK-98&cc_subject=men
[21] http://apps.who.int/whocc/Detail.aspx?cc_ref=DEU-52&tor=rabies&

Annex 2: List of participants

Albania	Iris Hatibi
	Andi Koraqi
Armenia	Karine Teymurazyan
Azerbaijan	Rakhila Mammadbayova
Bosnia and Herzegovina	Pava Dimitrijevic
	Almedina Moro Hadzihasanovic
Georgia	Paata Imnadze
Kazakhstan	Sandugash Mukazhanova
	Zabira Aushakhmetova
Kyrgyzstan	Elnura Duishenadieva
	Aigul Dzhaparova
Northern Macedonia	Golubinka Boshevska
Serbia	Ivana Cirkovic
Tajikistan	Sino Narzizoda
Turkey	Selcuk Kilic
	Kemal Memisoglu
Turkmenistan	Kemal Mavlamov
Ukraine	Nataliia Vydaiko
Uzbekistan	Nulyufar Vahabova
Animal and Plant Health Agency, United Kingdom	Adrian Whatmore
Erasmus University Hospital, Netherlands	Richard Molenkamp
Emerging Viral Diseases-Expert Laboratory Network	Chantal Reusken
Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health, Germany	Markus Keller
National Institute for Infectious Diseases 'L. Spallanzani', Italy	Giuseppe Ippolito
Public Health England, United Kingdom	Richard Vipond
Robert Koch Institute, Germany	Lars Schaade
South East European Center of Infectious Diseases Surveillance and Control	Silvia Bino
WHO Country Office Kyrgyzstan	Kaliya Kasymbekova
WHO Country Office Tajikistan	Abdulakhad Safarov
WHO Country Office Turkey	Murat Simsek
WHO Country Office Turkmenistan	Ayjeren Myratdurdyyeva
WHO Headquarters	Mark Perkins
WHO Observer	Xhevat Jakupi
WHO Regional Office for Europe	Maria Amante
	Dmitriy Pereyaslov
	Joanna Zwetyenga
	Caroline Brown
	Krystyna Hagebro
Translators	Olga Aleksinskaya
	Anna Nikolskaya

Annex 3: Agenda of the meeting

Provisional programme

Wednesday, 30 January 2019

9:00 - 9:30 Registration

9:30 - 10:00 Official opening of the meeting

Kemal Memişoğlu, Ministry of Health Turkey and Caroline Brown, WHO

Regional Office for Europe

10:00 - 10:10 Introduction to the meeting agenda

Joanna Zwetyenga, WHO Regional Office for Europe

10:10 - 10:25 Public health preparedness and response in the WHO European Region and the role of laboratories

Caroline Brown, WHO Regional Office for Europe

10:25-10:30 Better Labs Mean Better Health video

10:30 - 11:00 Coffee Break

Group Photo

11:00 – 11:15 Laboratory networks for high threat pathogens

Mark Perkins, WHO headquarters

11:15– 11:35 Launching WHE-LAB, the WHO Regional Office for Europe Emergency

Programme laboratory task force for high threat pathogens

Joanna Zwetyenga, WHO Regional Office for Europe

11:35 - 12:00 Roundtable Presentation of WHO Collaborating Centers and organizations

Robert Koch Institute

Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health

National Institute for Infectious Diseases INMI 'L. Spallanzani'

Erasmus University Hospital Rotterdam

12:00 - 13:00 Lunch

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13:00 - 13:30

Roundtable Presentation of WHO Collaborating Centers and organizations

Public Health England

Stavropol Research Antiplague Institute

Animal and Plant Health Agency

Emerging Viral Diseases - Expert Laboratory Network

Session 1: Model for laboratory networks for high threat pathogens in the WHO European Region

13:30 - 13:45

Drivers of Laboratory System Reform: National Laboratory Working Group in Kyrgyzstan

Kaliya Kasymbekova, WHO Country Office Kyrgyzstan

13:45 - 14:00

Reform of the Public Health Laboratories in Armenia

Karine Teymurazyan, Reference Laboratory Center

NCDC Armenia

14:00 – 15:00

Group work session 1:

 Members and Terms of Reference of WHE-LAB

15:00 – 15:30

Coffee Break

15:30 - 16:00

Plenary discussion on group work

16:00 - 16:15

Presentation on laboratory system optimization in Turkey

Selçuk Kılıç, Department for Microbiology Reference Laboratories and Biological Products

16:15 - 16:30

Laboratory activities of South East European Center of Infectious Diseases

Silvia Bino, Control of Infectious Diseases Department

Institute of Public Health

16:30 - 17:00

End of Day 1

Thursday, 31 January 2019

9:00 – 9:15

Recap of day 1

9:15 – 9:30

Presentation on sample referral and transport in Tajikistan

Abdulakhad Safarov, WHO Country Office Tajikistan

9:30 – 10:30

Group work session 2:

 External Quality Assessment

10:30 – 11:00

Coffee Break

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11:00 - 11:30

Plenary discussion on group work

11:30 – 11:45

EU CBRN CoE Project 53: Strengthening biosafety and biosecurity through the national legal framework and provision of specialized training in Kyrgyzstan

Aigul Dzhaparova, Laboratory of Republican Center of Quarantine and Especially Dangerous Infections

11:45 – 12:30

Group work session 3:

 Assessment of national capacity needs (questionnaire);

12:30 - 13:30

Lunch

13:30 – 14:00

Plenary discussion on group work

14:00 – 14:15

Presentation on mentoring or a quality management system implementation

Elnura Duishenadiev, Laboratory of Republican Center for Quarantine and Especially Dangerous Infections

14:15 – 15:30

Group work session 4 :

 Building networks and links between networks (national, international, twinning, referral, Material Transfer Agreements, Memorandum of Understanding , etc.)

15:30 – 16:00

Coffee break

16:00 – 16:30

Plenary discussion on group work

16:30 – 17:00

Roundtable and steps moving forward

17:00 - 17:15

Closure of the meeting

The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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