Welcome

Welcome to our third bulletin for 2022, which reflects part of our activities performed in the Kyrgyz Republic during the months of May and June 2022. We would like to thank all stakeholders and involved experts for their valuable efforts and looking forward to having continuous and fruitful achievements.

Medical waste management training in Bishkek

From 12 to 13 May 2022, WHO provided a training on medical waste management for 21 participants. The training focused on waste management strategies and good practices in healthcare facilities to achieve a safer environment and minimize risk within laboratories. Participants showed a 13.5% of knowledge increase, the average pre test result was 49.5% and the post test increased to 63%. The training was part of comprehensive approach to enhance biosafety measures in laboratories.

Training on Influenza virus isolation

From 16 until 27 May 2022, WHO facilitated a training on Influenza virus isolation, more specifically on cell culture, to the national experts at the National virology laboratory of the Department of diseases prevention and state sanitary and epidemiological surveillance (SSES). The training provided by Dr Polina Petrova, WHO EURO consultant, and the expert at the Influenza Institute, Saint Petersburg, Russia. The training helped the national professionals to identify gaps and develop a plan of work to revive tissue culture activities in the country.
The overall objectives of the COVID-19 IAR was to conduct a qualitative and structured review of the actions taken by the responsible national and local institutions to contain the current COVID-19 outbreak and prevent further outbreaks in the country.

WHO facilitated with the Ministry of Health an Intra-Action Review (IAR) workshop covering two pillars of the COVID-19 response: Surveillance, case investigation and contact tracing and National laboratory system.

Several recommendations and findings were identified, such as:

- Strengthen communication and flow of information between surveillance and laboratory pillars.
- Support digitalization of the laboratory services and specifically regarding sample registration, and sample traceability.
- Support laboratory workforce through standardized national training curricula.
- Finalize the review and update of laboratory test costing using WHO Lab costing tool.
- Finalize and implement the national transport strategy for better sample transportation.
- Support the development of national External Quality Assurance programme for COVID-19
- Development of a national plan for maintenance of built capacity during COVID-19.

Verification of SARS-CoV-2 Influenza multiplex assay and training of national professionals:

During the second week of May, WHO experts supported national experts at the Department of diseases prevention and state sanitary and epidemiological surveillance (SSES) to verify the SARS-CoV-2 and Influenza PCR multiplex assay as part of the vaccine effectiveness study in the Kyrgyz Republic, to be able to detect either one of the viruses in a single test. The team prepared set of presentations and drafted training agendas for two trainings which were delivered by the national experts to laboratory professionals from laboratories around the country from 6 to 9 June 2022. The trainings were entirely delivered by national experts from Department of SSES, as a part of supporting the national capacity to take ownership and prepare national trainers.

SARS-CoV-2 Intra-Action Review of National Laboratory System on 16 June 2022, Issyk-Kul

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- Development of a national plan for maintenance of built capacity during COVID-19.
As a result of close collaboration with WHO, on 16 June 2022, Kyrgyzstan has successfully uploaded SARS-CoV-2 sequencing data which were sequenced and analyzed entirely within the country into the GISAID database (Global initiative on sharing all influenza data).

WHO led the process and coordinated efforts with different international partners and WHO Collaborating Centres, by providing assessment, guidance, procurement, and several basic and advanced training courses on sequencing and further delivered advanced bioinformatics training on how to analyze and upload sequences to GISAID platform. Onsite training, and sequencing capacity were held at the TB National Reference Laboratory (TB NRL). The country’s success was a result of close coordination between Department of SSES, TB NRL, and all involved partners in this field.

Kyrgyzstan participated in the High threat Pathogen Taskforce, Antalya, Republic of Türkiye:

National experts actively participated in the regional meeting on High Threat Pathogen laboratory taskforce which WHO held in Antalya, Republic of Türkiye, from 22 to 23 June 2022. Experts from the region had a very fruitful and thorough discussions on laboratory readiness, preparedness, and maintenance of the capacity built during COVID-19 in order to serve public benefit and allow for better laboratory diagnostics and reliable testing against potential emerging diseases.
Laboratory experts reviewed the waste management process in Bishkek:

On 26 June 2022, WHO along with national experts visited one of the Medical waste disposal facilities and reviewed the process of waste management in laboratories and further processing of waste after decontamination. The facility - which processes average of 20% only of the Medical waste in Bishkek represents a better situation than direct disposal in the landfill, yet, several findings were addressed such as inappropriate storage, spills of sharps and needles, tons of unprocessed waste, and much more. Recommendations to have regular inspection visits and follow-up on implementing control measures were advised. A comprehensive report including detailed findings will be shared with experts of the Ministry of Health for a more safe and clean environment.

Dr. Gulmira Kalmambetova, head of the TB National Reference Laboratory answers

As a member of the Coordinating Laboratory Council (CLC), I see what changes are taking place in the laboratory system of the country and, of course, with my colleagues from the CLC, we actively participate in the implementation of activities for the implementation of QMS through the national mentoring program, prepare laboratories for accreditation according to international quality standards, conduct training on ensuring biological safety measures and biosecurity in laboratories.

I would also like to note that the implementation of SARS-CoV-2 genome sequencing through utilizing sequencing capacities at the TB National Reference Laboratory (NRL) of the Kyrgyz Republic was supported by the WHO and by laboratory specialists of the country which built our capacity to upload sequences into the global GISAID database for the first time at the national level.
COVID-19 pandemic challenged the laboratory system on several areas, such as limitations in number of laboratories, trained specialists, test assays and reagents, etc. But a challenge is always an opportunity. We were able to properly respond through building new laboratories, with qualified laboratory specialists, providing quality testing in proper time.

Number of laboratories significantly increased from two public health laboratories in 2020, up to twenty-five testing laboratories (fifteen governmental and ten private labs). Another five PCR laboratories are almost ready for opening.

Significant contribution and support in improving lab system capacities was provided by WHO. Huge assistance was provided through procurement of test kits and reagents, essential trainings were provided, enhancing biosafety and biosecurity, and shipment of positive samples to WHO Reference Centers for confirmation.

A Special achievement was building the capacity for Whole Genome Sequencing of SARS CoV-2. Moreover, supporting labs in implementing QMS for quality testing.

Also it is necessary to note the support of international organizations in the Kyrgyz Republic: UNDP, USAID, GIZ, IAEA, ADB, WB, IDB and others, which provided tremendous support during the difficult time of the COVID-19 pandemic.

Dr Aigul Djumakanova, head of the Center of Laboratory Investigations of the Department of SSSE, member of the Coordinating Laboratory Council:

Digesting the Norm sessions on Quality Management System according to ISO 15189: 2012 standard continued during the months of May and June. There will be a short break in August, then we will resume back on 7 September 2022.

If you don’t have access details, please contact us to receive the information.