REPORT
OF THE EXTERNAL EVALUATION COMMISSION
ON THE RESULTS OF COMPLIANCE ASSESSMENT
OF THE RSE ON THE REM M. AIKIMBAYEV KAZAKH SCIENTIFIC
CENTRE FOR QUARANTINE AND ZOONOTIC DISEASES OF THE
MINISTRY OF HEALTHCARE OF THE REPUBLIC OF KAZAKHSTAN
WITH THE STANDARDS FOR INSTITUTIONAL ACCREDITATION OF
ORGANISATIONS FOR CONTINUING PROFESSIONAL DEVELOPMENT
(CPD) FOR HEALTHCARE PROFESSIONALS

Dates of the site visit: June 28-29, 2019

1. Composition of the External Evaluation Commission
In accordance with the ECAQA order No.41 dated June 14, 2019, the External Evaluation Commission (EEC) was formed to conduct institutional accreditation of the RSE on the REM M. Aikimbayev Kazakh Scientific Centre for Quarantine and Zoonotic Diseases for compliance with the Standards for Institutional Accreditation of Organisations for Continuing Professional Development (CPD) for Healthcare Professionals on June 28-29, 2019 with the following composition:

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In the period from June 28, 2019 to June 29, 2019, assessment of the conformity of the main activities of the RSE on the REM M. Aikimbayev Kazakh Scientific Centre for Quarantine and Zoonotic Diseases (hereinafter – KSCQZD) with the ECAQA Standards for Institutional Accreditation of Organisations for Continuing Professional Development (CPD) for Healthcare Professionals (hereinafter - accreditation standards) was conducted.

The EEC report contains assessment of the KSCQZD for compliance with the ECAQA accreditation standards, recommendations of the EEC on further improvement of activities of the organisation implementing continuing education programmes.

2. General Part of the EEC Final Report

2.1 Introduction of the RSE on the REM M. Aikimbayev Kazakh Scientific Centre for Quarantine and Zoonotic Diseases

The RSE on the REM M. Aikimbayev Kazakh Scientific Centre for Quarantine and Zoonotic Diseases of the MOH of the RK (hereinafter referred to as KSCQZD) carries out activities in healthcare, including medical continuing education, in accordance with the paragraph 4 of the Charter that was approved by the Order of the Chairman of the State Property and Privatization Committee of the Ministry of Finance of the Republic of Kazakhstan dated November 05, 2015 No.1352 (Order, as amended and supplemented, dated February 02, 2018 No.105).

The KSCQZD was formed in 1949 as a part of the Soviet control system of especially dangerous infectious diseases, and managed a network of nine Central Asian plague control stations. To date, establishment and development history of the KSCQZD is 70 years.

From 1949 to 1991, the centre was called the Central Asian Scientific-Research Anti-Plague Institute. In 1991, the anti-plague service of the republic was under the jurisdiction of the Ministry of Healthcare of the Republic of Kazakhstan (hereinafter referred to as the MOH of the RK). In January 1992, the Central Asian Scientific-Research Anti-Plague Institute was transformed into the Kazakh Anti-Plague Scientific-Research Institute (hereinafter hereinafter referred to as KASRI) of the Ministry of Healthcare of the Republic of Kazakhstan, and in 2001 the KASRI was renamed into the Republican state budget-supported enterprise Masgut Aikimbayev Kazakh Scientific Centre for Quarantine and Zoonotic Diseases.

Since 1950, the Central Asian Anti-Plague Institute has been one of the central educational institutions of the anti-plague system for specialists in especially dangerous infections. Since its foundation in 1950, the Institute’s training department has trained more than 3,000 doctors, zoologists and biologists from Russia, Ukraine, Belarus, Moldova, Georgia, Azerbaijan, Armenia, Uzbekistan, Kyrgyzstan and Kazakhstan, as well as from the Soviet Ministry of Defence.

In the 60s of the twentieth century, the institute was the methodology centre of almost the entire (except the Turkmen Soviet Socialist Republic) anti-plague service of Central Asia and Kazakhstan, which was a specialized anti-epidemic service that was directly subordinate to the Head Department of Quarantine Infections of the USSR Ministry of Healthcare.
At present, the KSCQZD is a consultative and methodology centre of the anti-plague system of the RK functioning in conjunction with 9 Anti-Plague Stations of the Committee for Quality Control and Safety of Goods and Services of the Ministry of Healthcare of the Republic of Kazakhstan (hereinafter referred to as APS). Also, there is a unique Central Reference Laboratory (hereinafter referred to as CRL) in the organisational structure which has no analogues throughout Central Asia. The KSCQZD is the only research centre in the country addressing the problems of plague and other highly infectious diseases (hereinafter referred to as HID) and also is: the WHO Regional Centre for Plague; Scientific Centre for Problems of HID; Advisory and methodology centre on the issues of HID; Reference Centre for Plague and Cholera; Strategic object (Decree of the Government of the Republic of Kazakhstan dated November 14, 2011, confidential); Holder of the Republican Collection and the Republican Depository of Highly Dangerous Pathogens (Decree of the Government of the Republic of Kazakhstan No. 850 “On Republican Collections of Microorganisms”, dated July 30, 2002); Centre for the development and production of preventive and diagnostic drugs for the diagnosis of HID; Testing centre (Accredited according to ST RK (national standard of the Republic of Kazakhstan) ISO/IEC 17025-2009 testing laboratory); Training Centre; Holder of zoological and parasitological collections (takes 4th place in the world and 2nd in the CIS); The only holder for the nursery of SPF laboratory animals in the Republic of Kazakhstan.

The number of employees is 210 including 64 scientific employees, 6 doctors and 20 candidates of sciences, 1 PhD, 19 masters.

The KSCQZD has the necessary material, technical and human resources for conducting the educational process at the modern level. The teaching staff of the Training Centre (hereinafter referred to as the Centre) is staffed by leading scientists and specialists of the KSCQZD: 27 educators, including 6 doctors of sciences, 20 candidates of sciences, 1 PhD, whose main activity is retraining and professional development of personnel working with pathogens highly dangerous and quarantine infections.

The trainees of professional development and retraining courses are specialists of the sanitary and epidemiological service of Kazakhstan (doctors, zoologists, laboratory assistants of Anti-Plague Stations and branches of the National Centre of Expertise of the Committee for Quality and Safety Control of Goods and Services of the Ministry of Healthcare of the Republic of Kazakhstan (hereinafter referred to as the NCE), as well as foreign specialists in the field of highly infectious diseases from Mongolia, Kyrgyzstan, Tajikistan, Uzbekistan, Turkmenistan, Armenia, Georgia and Azerbaijan.

At retraining courses, the KSCQZD trains specialists in laboratory diagnostics and epidemiology in HID. The KSCQZD is the only institution in the system of medical, as well as veterinary and biological education for training of specialists in the field of highly infectious diseases, which operates in accordance with national and international standards aimed primarily at protecting public health and biosafety. The KSCQZD has highly qualified personnel practicing modern methods for the diagnosis of pathogens of highly dangerous bacterial and viral infections. It has a high productivity of scientific
research, patents the results, uses new information technologies, issues instructive and methodology documentation, manuals and monographs, introduces new modern methods of diagnosis and monitoring of highly infectious diseases. It implements a quality management system in accordance with the ISO standards. The KSCQZD carries out active joint research work with leading foreign centres and services that operate in health care for the prevention of highly dangerous and quarantine infections.

The high quality of the research carried out is indicated by the citation rates of scientific works of scientific employees of the KSCQZD in international databases and high places in the rating of scientific research of the Ministry of Healthcare of the Republic of Kazakhstan. In the period from 2016 to 2018, more than 500 citations of the scientific works of the KSCQZD employees were recorded in the internationally recognized scientific electronic databases: the Web of the Knowledge – 537 citations, the Google Scholar – 1 citation, the RISC (Russian Science Citation Index) – 49 citations.

At the same time, the KSCQZD takes leading positions for all performance indicators in the rating of scientific research activities of non-clinical research centres: 2nd place in 2015, 2nd place in 2016, 1st place in 2017, 1st place in 2018.

The results of the scientific activity of the KSCQZD are printed publications, which are educational literature used for the preparation of lecture materials and independent training of students. Over the past 5 years, a total of 22 publications have been released (6 monographs, 9 guidelines, 2 manuals for practitioners, 5 study guides).

A bacteriological room with 26 seats is equipped for practical training; microbiological cultures, exhibits of the zoological and parasitological museums are used during the training; lecture halls are equipped with modern equipment, computers; the facilities include auxiliary rooms, laboratory room, isolation ward, infectious area for working with infected animals, separate rooms in the central laboratory for practical and theoretical studies; the total area is 6324.5 sq. m, of which the useful area is 5531.79 sq. m; the fund of scientific and educational medical literature of the KSCQZD library includes about 50 thousand items.

The unique safe technique used in Kazakhstan for working with HID allows minimizing the risks of intra-laboratory infection. The KSCQZD provides accommodation for trainees to live in the territory adjacent to the KSCQZD, a dormitory with a total area of 325.8 sq. m, equipped with a heating system, water and sewer, showers and sanitary rooms, a washing machine, sleeping accommodation for 18 people, rooms for cooking and eating, refrigerators, microwave, gas stoves and kitchenware. A TV is installed for leisure time of trainees. The dormitory has an Internet-connected IT room, trainees have the opportunity to get unlimited Internet access.

2.2 Information on previous accreditation
Institutional accreditation of the KSCQZD as an organisation implementing a continuing education programmes has not yet been carried out.
2.3 Analysis of the self-evaluation report of the RSE on the REM M. Aikimbayev Kazakh Scientific Centre for Quarantine and Zoonotic Diseases for compliance with the Standards for Institutional Accreditation of Organisations for Continuing Professional Development (CPD) for Healthcare Professionals

Institutional self-evaluation of the KSCQZD was carried out on the basis of the order No. 89 dated 24.05.2019 “On conducting national institutional accreditation” for compliance with the standards of institutional accreditation of continuing education organisations (continuing professional development).

The institutional/specialized self-evaluation report of the RSE on the REM M. Aikimbayev Kazakh Scientific Centre for Quarantine and Zoonotic Diseases of the MOH of the RK is presented on 150 pages including 24 annexes according to relevant standards. A list of members of the working group on preparation for institutional accreditation of the RSE on the REM M. Aikimbayev Kazakh Scientific Centre for Quarantine and Zoonotic Diseases of the MOH of the RK, indicating the responsibilities of each member of the internal commission; data on the person responsible for conducting a self-evaluation for compliance with the Standards of institutional accreditation are attached to the institutional self-evaluation report.

The report is comprehensive, structured, stylistically appropriate, and characterized by internal unity of the data on activities of the educational organisation seeking accreditation, and presence of references to tabular material.

The report is compiled in accordance with the Guidelines for conducting self-evaluation in the framework of institutional accreditation and is fully consistent with the Standards for Institutional Accreditation of Organisations for Continuing Professional Development (CPD) for Healthcare Professionals. There is a list of members of the internal commission for self-evaluation, indicating the responsibility of each member of the internal commission (13 people in total), data on T.K. Yerubayev, a representative of the Institution responsible for carrying out institutional self-evaluation. A representative of the KSCQZD responsible for preparation for institutional accreditation is A.M. Dmitrovsky, senior researcher scientist at the training centre, doctor of medical sciences, professor.

During the self-evaluation period the working group on preparation of the report and the Institution staff executed the following work: the necessary data was collected in accordance with the standards of institutional accreditation; careful analysis of the materials was carried out and reflected in the report. The content of the Self-Evaluation Report is structured in accordance with the ECAQA Standards for Institutional Accreditation and includes a description of strengths and areas requiring improvement for each of the 9 standards.

The database, appendices are full and complete, presented sequentially and references to them are reflected in the text of the report. The report is written using appropriate language; the wording for each standard is clear and adequate; the tables contain references in the text and have continuous numbering.

3. EEC conclusions on external evaluation and site visit
The site visit of the external evaluation commission to the KSCQZD in order to verify the data of the self-evaluation report and validate the data on-site was organized in accordance with the programme approved by the ECAQA Director General S.S. Sarsenbayeva and by the chairman of the EEC G.A. Ibrayeva and the director of the KSCQZD T.K. Yerubayev. During the site visit and external evaluation of the KSCQZD for compliance with the standards of institutional accreditation of continuing education organisations (continuing professional development), EEC members carefully studied and evaluated the main indicators of the educational organisation.

External experts analyzed the information received during the site visit to the KSCQZD and meetings with leadership and employees; during questioning of trainees and educators, interviewing employers and trainees more than 50 documents were studied and compared with the data of the self-evaluation report, which made it possible to verify the reliability and validation of the information provided by the KSCQZD for compliance with the standards of institutional accreditation of continuing education organisations (continuing professional development).

Despite the fact that the KSCQZD described its best practice in the self-evaluation report, during the visit by external experts, additional information and documents were requested (strategic plan, regulations, instructions, work procedures, contracts with educators, contracts with trainees, register of retraining certification, certificates of professional development, academic complexes of specialties, syllabuses, tests, questionnaires, questionnaire results, records, minutes of meetings of the Academic Council, didactic materials, discipline-related presentations, certificates, etc.), which revealed that the activities of the KSCQZD comply with the standards of institutional accreditation of continuing education organisations (continuing professional development).

On the last day of the visit, members of the EEC conducted assessment of compliance of the educational organisation seeking accreditation with the “Quality Profile and External Evaluation Criteria for Compliance with the Standards of Institutional Accreditation of Continuing Education Organisations (Continuing Professional Development)” developed by the ECAQA. The above document was completed individually by each member of the EEC. All Standards are met. No objections were made by members of the EEC.

Thus, the analysis of the institutional self-evaluation report and the expert assessment by the EEC provided strong evidence of the conformity of the educational activities of the KSCQZD with the Accreditation Standards and made it possible to develop Recommendations on improvement.

The accreditation procedure was carried out to the full extent in accordance with the ECAQA Regulations on the External Evaluation Commission, the ECAQA Guidelines for the External Evaluation of a Medical Education Organisation.

4. Analysis of compliance of the RSE on the REM M. Aikimbayev Kazakh Scientific Centre for Quarantine and Zoonotic Diseases with the Standards for Institutional Accreditation of Organisations for Continuing Professional Development
Development (CPD) for Healthcare Professionals and review of the strengths of each standard

**Standard 1: Mission and outcomes**

KSCQZD was established in 1949 and directs its activities to ensure continuous professional development in the field of highly infectious diseases.

The members of the EEC obtained evidence of the presence of the mission and vision of the KSCQZD, which are available for review by all stakeholders (employees, trainees, patients) both on the organisation’s website, and on information stands, promotional materials. The process of preliminary discussion and development of the mission was attended by employees, faculty and trainees of the KSCQZD, as well as stakeholders. The mission was brought to general notice of employees of the organisation during general meetings.

The outcomes of training are reflected in the training programmes, syllabuses of specialties. This fact was established when studying the results of a survey of trainees upon completion of continuing education programmes.

Experts were convinced that the KSCQZD, existing at the market of CPD educational services for more than 70 years, is one of the authoritative and sought-after organisations of continuing education.

**Strengths:**
1. Specialized education in regard to retraining and professional development.
2. Multi-functionality of educational programmes.
3. Practical focus of educational programmes.
4. Multifariousness of biosafety training.
5. Sufficient financial incentives.
6. Practice of justification of internships.

**The EEC conclusions on the criteria:** comply - 8, partially comply - 5, do not comply - 0

**Standard 1: accomplished**

**Recommendations on improvement:**
1) To adapt the mission and vision of the KSCQZD taking into account the educational direction of the organisation;
2) The work of the KSCQZD should be improved in terms of identifying and informing stakeholders about the outcomes of training in continuing education programmes.

**Standard 2: Educational programme**

The experts determined that the implementation of continuing education programmes is carried out in accordance with the regulatory legal acts of continuing education. Training programmes are developed on the basis of the Order No. 165 dated April 14, 2017 of the Ministry of Healthcare of the Republic of Kazakhstan “On approval of the model programmes for professional development and retraining of medical and pharmaceutical personnel”.

During the site visit, experts obtained evidence of the effective implementation of
educational programmes and methodology support of the educational process, the availability of internal regulatory documents governing the organisation of the educational process. The KSCQZD has the necessary materiel and technical support for various forms of training. Academic and methodological complexes of disciplines (teaching methods) are developed in hard copy and electronic format. KSCQZD uses various active teaching methods: a multidisciplinary approach, a roundtable discussion, discussions, debates, case studies, paired activity, presentations, business simulation games, working in small groups, brainstorming sessions, problem-based learning.

Innovative practice-oriented teaching methods are actively implemented.

The KSCQZD conducts primary specialization of specialists in various fields, the Ministry of Healthcare, Ministry of Agriculture, Ministry of Education and Science and other interested ministries and departments of the Republic of Kazakhstan working in the field of highly infectious diseases, subsequently these same specialists undergo various retraining cycles in biosafety, analytical epidemiology, GIS-technologies, microbiology, virology, laboratory diagnostics, molecular genetic testing, etc. In order to evaluate the methods for achieving the relevant professional qualities, questionnaires are continuously conducted at the end of the cycle; questionnaires are developed individually for each programme.

Since 2015, the centre has maintained an electronic database of trained specialists of the centre, and specialists from other medical organisations of the Plague Control Stations, National Centre of Expertise (NCE), Scientific and Practical Centre of Sanitary and Epidemiological Expertise and Monitoring, Republican Veterinary Laboratory, National Veterinary Reference Centre.

Trainees are familiarized with the levels of evidence in medicine, know which databases are better to use, and have information retrieval skills.

**Strengths:**
1. The only specialized training centre in the Republic of Kazakhstan for training of specialists in educational programmes of continuing education in the field of highly infectious diseases.
2. Fundamental training, experimental work in laboratory conditions with vaccine strains of dangerous bacterial pathogens.
3. The requirements of international standards for biosafety are taken into account in educational programmes in regards to working with pathogens of highly infectious diseases.
4. Training of veterinary and biological specialists for relevant institutions.

**The EEC conclusions on the criteria:** comply - 16, partially comply - 3, do not comply - 0.

**Standard 2: accomplished**

**Recommendations on improvement:**
1) To bring the existing academic and methodical documentation in compliance with the requirements of the legal acts in continuing professional education;
2) To expand the access of trainees of educational programmes to updated data of scientific results and practical experience (Internet resources, modern educational and innovative laboratory technologies).

**Standard 3: Assessment and documentation**

Assessment of students' academic achievements is carried out using criteria, regulations and procedures developed in accordance with the set goals and objectives of the KSCQZD in accordance with state directive and internal regulatory documents.

The EEC made sure that the KSCQZD ensured transparency of the entire educational process and academic performance monitoring system and provided trainees with a wide range of educational services applying modern educational technologies during training and ensuring continuous control of the quality of training.

Experts noted that the KSCQZD has developed a student assessment system. The assessment system is presented in a separate section in the developed training programmes and is determined by the formative assessment during the cycle, the summative assessment (testing), writing a reference paper or making presentation (PPT) on the selected topic. Along with traditional assessment methods including testing (preliminary and summative assessment) and writing a reference paper, the level of acquired practical knowledge is also assessed (for example, bacteriological skills in biosafety level-2 or biosafety level-3), solving case problems, business games according to developed scenarios (for example, evacuation of an unconscious from the biosafety level-3 cabinet using disinfection), analysis of laboratory protocols and comparing them with those of their organisation. The KSCQZD implements educational programmes in continuing education in the field of HID, while forming a specialist who can conduct laboratory diagnostics of HID, organise and conduct anti-epidemic measures to prevent the spread of infection, as well as monitoring studies of natural foci, while observing the principles of biosafety and biosecurity.

The basic and summative assessment of trainees of continuing education programmes. According to the results of the final testing, students are issued certificates of the standard form confirming the completion of training. A consistent monitoring and documentation system was developed and implemented; a standard operating procedure (hereinafter referred to as SOP), which describes the algorithm for admission and expulsion of trainees and contains a list of documents required for admission, was established.

**Strengths:**

1. Extensive teaching experience, including experience of teaching foreign students in multicultural groups.
2. Evaluation and subsequent improvement of the educational programme on a regular basis through different feedback channels.

**The EEC conclusions on the criteria** comply - 5, partially comply - 2, do not comply - 0

**Standard 3: accomplished**

**Recommendations on improvement:**
1) To improve educational process in accordance with the requirements of the regulatory legal acts of continuing professional education (corresponding number of students, document management, educational and methodological work on the development of internal documents).

**Standard 4: The Healthcare Professionals**

The EEC experts obtained evidence that the KSCQZD seeks to carry out educational activities in accordance with established state requirements, regulatory and legal acts in the field of continuing professional education, taking into account a flexible and mobile training system for healthcare professionals.

The EEC was convinced that a professional, highly qualified teaching staff worked at the KSCQZD: doctors and candidates of medical and biological sciences, professors, associate professors with great experience in training specialists, which determines the demand for the KSCQZD educational services at the education market.

The admission of students, the issuance of certificates is based on the Rules approved by the Order No. 691 dated November 11, 2009 of the Ministry of Healthcare of the Republic of Kazakhstan. In the case of violation of the rules of the educational process in accordance with the Regulation on the educational process, the trainee is expelled without issuing a standard certificate and the head of the organisation of the expelled trainee is informed.

The KSCQZD also carries out capacity building for teachers, taking into account current trends in active learning, development of critical thinking, analysis skills and an emphasis on independent work, training using simulations and simulators, the development of evidence-based medicine, etc. In order to provide academic advice to health professionals, the training of teaching staff is conducted to improve pedagogical skills.

The formation of the trainee population of continuing professional education programmes is carried out on the basis of a personal application of the trainee or a request from a medical or other releasing/receiving organisation with confirmation of the availability of the corresponding professional education and specialty. When applying for professional development and retraining cycles, trainees should submit the following documents: copy of an identity card, copy of a diploma of education, professional development and continuing education (if available), a copy of a specialist certificate.

The members of the EEC noted that a web page had been created on the official website where all information about the events was posted, a course schedule of the continuing education and retraining courses for specialists with medical and pharmaceutical education was presented.

**Strengths**

1. A personalized approach to each specialist.
2. Low price policy in order to stimulate trainees in learning.
3. The content of educational programmes is formed on the basis of the latest scientific achievements and the principles of evidence-based medicine.
**The EEC conclusions on the criteria:** comply - 19, partially comply - 0, do not comply - 0

*Standard 4: accomplished*

*Recommendations on improvement: none*

**Standard 5: CPD provision**

The KSCQZD demonstrated its desire to meet all regulatory requirements (orders, regulations, rules, qualification requirements, methodological support) in continuing education.

The experts were convinced that the KSCQZD regularly evaluated and reviewed programmes with the participation of students, employees and other stakeholders based on systematic collection, analysis and management of information, as a result of which the programmes were adapted to ensure their relevance. Monitoring results are available to all stakeholders.

The main manager of the training process is the head and teachers of the Training Centre accountable to the director of the KSCQZD, deputy director for epidemiological issues, production and training, and the Academic Council.

The EEC noted that specialists of specialized laboratories according to the subject of their specialties, holding degrees of doctors and candidates of science, PhD and who had received international training in andragogy (adult education), took part in continuing education programmes and international trainings. The KSCQZD trains specialists with higher education (doctors, biologists) and with secondary specialized education (laboratory assistants).

A bacteriological cabinet with 24 seats is equipped for practical training; germ cultures, exhibits of the zoological and parasitological museums are used during the training; lecture halls are equipped with modern equipment, computers; the fund of scientific and educational medical literature of the KSCQZD library includes about 50 thousand items.

The KSCQZD provides teachers with equal opportunities for continuous professional development that are consistent and contribute to the achievement of mission and learning outcomes.

The common methods of training at the KSCQZD are mentoring (the head of the laboratory, biosafety specialist or an experienced employee conducts training with attached personnel during the daily work), the method of complicating tasks (a special programme of work activities arranged in terms of their importance with expansion of volume of the task and enhancement of complexity; the programme is conducted by biosafety experts in the training centre of the Central Reference Laboratory before admission to independent work at the biosafety level-3 during initial training of laboratory personnel and persons involved in research projects), case studies, business games, modeling, safety training, etc. Teachers of the KSCQZD Training Centre and trainers of the Central Reference Laboratory received training at the CDC / CAR on FELTP (6 employees), Great Britain (Project P53, Ministry of Healthcare of England: 6 employees), Germany (Robert Koch Institute, Bernhard Nocht Institute for Tropical
Medicine, GIBACHT programme: 4 employees), Canada (Biosafety programme: 2 employees).

**Strengths:**
1. Good facilities and resources of the Central Reference Laboratory.
2. Government support in vocational training, implementation and certification of quality management systems.
3. Stable state order for educational activities.
4. Competent staff of the Central Reference Laboratory, trained according to international standards, including training abroad.
5. Existence of standard training programmes and SOPs on safety issues, laboratory techniques, applied epidemiology.
6. The interest of international organisations in conducting joint training at the Central Reference Laboratory.
7. Interdepartmental communication of the scientific staff of the Central Reference Laboratory (Ministry of Healthcare of the RK, Ministry of Education and Science of the RK and the Ministry of Agriculture of the RK).

**The EEC conclusions on the criteria:** comply - 10, partially comply - 2, do not comply - 0

**Standard 5: accomplished**

**Recommendations on improvement:**
1) To intensify work with HEIs and medical organisations to develop CPD programmes.

**Standard 6: Educational resources**

The experts were convinced that the KSCQZD had a developed material and technical resources for training, which meets the qualification criteria; compliance with the qualification criteria is monitored by the director. The KSCQZD provides access to relevant professional literature, there is a library that provides the staff of the centre with scientific, research and practice literature, and belles-lettres. The library is located on the ground floor of the administrative building. The total area of the library is 212 sq.m.; there is a book depository (111.9 sq.m.) and a reading room. The total book fund is 17317 units, which includes monographs, textbooks, guidelines, dictionaries, encyclopedias, reference materials, atlases, medical international and republican journals, theses, author's theses, materials of scientific international and republican conferences; 7560 copies of periodicals.

The educational process, in addition to lecture halls and multimedia equipment, is provided with specialized laboratory equipment (bacteriological tables, constant temperature baths, refrigerators, autoclaves, sterilizers, centrifuges, scales, microscopes, amplifiers, etc.), expendable materials (nutrient media, laboratory dishes, chemical reagents, dispensing apparatus, disinfectants, laboratory animals, etc.), as well as special rooms (infectious department for prossection and infection of laboratory animals, a bacteriological room, etc.) and trained teaching staff.

The EEC members also made sure that the KSCQZD had all the necessary material and human resources for conducting this kind of training. The structure of the KSCQZD
has a training centre located in a separate two-storey building. The personnel of this production structure have the position of head, scientific workers (4), laboratory assistants (2), disinfectors (3). In addition, all scientific employees and doctors of the KSCQZD are involved in conducting theoretical and practical training in accordance with their competence. The material and technical resources of the KSCQZD Training Centre includes lecture halls, a specialized bacteriological room, a library, training rooms, bacteriological boxes for the preparation of training materials for training sessions, teaching staff rooms, auxiliary rooms, a laboratory room, an isolation unit, an infectious room for handling infected animals, separate rooms at the Central Reference Laboratory for practical and theoretical sessions. The total area is 6324.5 sq.m. including 5531.79 sq.m. of useful area. The KSCQZD Training Centre provides training in continuing education and has three buildings for fulfilling training tasks: a two-storey main building on the territory of the KSCQZD and premises at the administrative building and at the Central Reference Laboratory, which are fitted with the latest equipment for conducting trainings on working at the biosafety level-3 and biosafety level-2 laboratories.

A dormitory with a total area of 325.8 sq.m. equipped with a heating system, water supply and sewage, showers and sanitary rooms, a washing machine, sleeping accommodation for 18 people, cooking and eating rooms, refrigerators, microwave, gas stoves and kitchenware was built for trainees living in the territory adjacent to the KSCQZD. A TV was installed for leisure of trainees. The dormitory has an internet-enabled computer lab, where trainees have access to unlimited Internet.

The KSCQZD maintains formal and informal collaboration with stakeholders to expand training sites. The KSCQZD provides access to web resources or other e-learning tools. The KSCQZD has its own website at crl.org.kz which provides information about the KSCQZD, its goals and mission, research projects, training courses, production, reference information, news, etc. Information is regularly updated.

Research priority of the KSCQZD is epidemiology, preventive measures, microbiology, bacteriology, clinical findings, treatment and ecology of especially dangerous infections, the results of this activity are significant for organisations of antiplague and sanitary-epidemiological services and practical public health. Over a 5-year period, various research projects have been carried out.

The KSCQZD promotes the establishment of relations with relevant national, regional and international organisations. In this regard, the leadership of the KSCQZD has signed cooperation agreements with various organisations.

**Strengths:**

1. Sufficient material and technical resources for training specialists in antiplague, sanitary-epidemiological and veterinary services.
2. Foreign training of the KSCQZD employees.
3. Consultative and methodological assistance in the regions for employees of the antiplague service.

*The EEC conclusions on the criteria:* comply - 21, partially comply - 3, do not comply - 0

**Standard 6: accomplished**
**Recommendations on improvement:**

1) To keep up to date and expand the Internet resources of the KSCQZD (website, access to international scientific and educational websites);
2) To further develop innovative technologies using distance learning elements;
3) To bring the operation of the library in accordance with regulatory requirements.

**Standard 7: Evaluation of CPD activities**

The development and evaluation of educational programmes is carried out taking into account the requirements of regulatory documents of the Ministry of Education and Science of the Republic of Kazakhstan and the Ministry of Healthcare of the Republic of Kazakhstan. The KSCQZD defines the structure and procedure of monitoring retraining and continuing education programmes. After each cycle conducted, feedback is held with students and their recommendations serve as the basis for improving programmes. The KSCQZD conducts continuous monitoring of the quality of the educational process to analyze the degree and completeness of the implementation of educational standards, the compliance with the operational goals of the KSCQZD, as well as the teacher qualification requirements to train a specialist.

The KSCQZD has developed a system for programme evaluation. The system provides programme evaluation at the stages of planning, implementation, analysis of results and amendments to allow monitoring the educational programme implementation and trainee performance and progress. This system includes the following: choosing a programme subject based on standard curricula, the KSCQZD internal necessity, practical health care (customer) needs, assessment of information letters, analysis of the epidemiological situation regarding highly infectious diseases, surveys of doctors and chief executives; discussion of programmes under development among stakeholders (teachers, research staff); internal and external review of the programmes; discussion and approval of the programmes at the Academic Council of the KSCQZD; evaluation of educational resources at the programme implementation stage. The monitoring and evaluation system for the educational programme is carried out at all levels and includes the Training Centre, Central Reference Laboratory trainers, biosafety specialists of the KSCQZD laboratories, the Academic Council. The educational programme is managed in accordance with the regulatory documents of the Ministry of Healthcare of the Republic of Kazakhstan and the Ministry of Education and Science of the Republic of Kazakhstan, and internal regulatory documents. The KSCQZD consistently collects information after each training cycle (questionnaire, interview) in a specially developed questionnaire form. The questionnaires were developed by the Training Centre on the basis of international experience and are approved by the Academic Advisory Council. Analysis of questionnaires makes it possible to evaluate the programme, the teacher and receive possible suggestions for programme improvement.

The result of continuing education is the accomplishment of the goals set by the specialist, the achievement of an increased level of professional skill, the development of abilities in new areas of activity, and the expansion of professional opportunities.

**Strengths:**
1. The educational programme evaluation has been established at the KSCQZD at all levels: supply of faculty staff, internal expert review, material and technical resources, methodological support.


3. Constantly conducted feedback with trainees on the educational programme evaluation.

**The EEC conclusions on the criteria:** comply - 8, partially comply - 3, do not comply - 0

**Standard 7: accomplished**

**Recommendations on improvement:**
1) To improve the process of monitoring and evaluating educational programmes (achievement of the mission, expected training outcomes, assessment methods, participation of individual health professionals in the CPD, the Regulation on CPD and educational resources).

**Standard 8. Organisation**

External experts studied the organisational structure and, during interview with leadership and responsible employees, obtained evidence on effective and efficient management of key areas of work and the organisation of the educational process. The leadership's activities regarding the KSCQZD mission achievement and objectives solution are studied and evaluated based on the analysis and generation of reports and plans, analysis of the implementation of the goals and objectives of the strategic plan, annual plan, reports. An effective advisory body for management and decision-making is the Academic Council.

Management of current activities is carried out by the Head of the Training Centre who coordinates his activities with the Director of the KSCQZD, Deputy Director for Epidemiological Work, Production and Training. The KSCQZD has collegial bodies to organise the operation of the centre with the involvement of all stakeholders and create transparency and collegiality in the discussion and decision-making on its work: Academic Council, Local Bioethics Commission, Young Scholars Council, Quality Management Council. All collegial bodies work in accordance with internal regulatory documents. The selection of the strategy for educational programme implementation (duration and methods of training, training location, provision of appropriate resources, teacher competencies) is carried out by the KSCQZD Bodies in the field of education and initiated by the specialists from the practical laboratories of the KSCQZD and the Academic Council of the KSCQZD. All structural divisions of the KSCQZD work in accordance with the Regulations on departments (laboratories) and job descriptions, which describe the objectives and functions of departments (laboratories), as well as job duties of employees. The KSCQZD has collegial bodies (the Academic Council, the Local Bioethics Commission, etc.) which include employers and representatives of laboratories.

The participation of a wide range of stakeholders in the evaluation and improvement of educational programmes at the KSCQZD is ensured by authorized bodies in the field of education and healthcare (MOH of the RK), persons and structures.
Trainees can be involved in the process of evaluating leadership performance by expressing their opinions and suggestions at the end of the cycle or a specific subject mastery, or by questioning related to opinions and comments. Trainee comments and suggestions on the organisation of the educational process (training schedule, etc.), the library fund and other issues directly related to the training can be taken into account.

Evaluation of the quality of the educational programme implementation at all stages of training is carried out by determining the level of satisfaction of trainees with educational programmes.

**Strengths:**
1. The KSCQZD is the only specialized organisation in the Republic of Kazakhstan for training of doctors, biologists, laboratory assistants throughout the country.
2. The presence of an equipped bacteriological room.
3. Stimulating the scientific activities of teachers (paying for the replication of teaching aids, guidelines, participation in scientific and technical projects, scholarships).

*The EEC conclusions on the criteria:* comply - 9, partially comply - 0, do not comply - 0

**Standard 8: accomplished**

**Recommendations on improvement:** none

**Standard 9. Continuous renewal**

During the site visit and conversations with employees, trainees, teachers, and representatives of practical health care, the EEC made sure that the KSCQZD periodically reviewed the organisational structure, strategic plan, programme contents, learning outcomes, assessment methods and resources. The needs of practical health care, the opinions of representatives of professional associations, new regulatory documents in health care and continuing education are taken into account. The KSCQZD leadership allocates all the necessary resources for the continuous renewal of continuing education programmes, including human resources (sufficient number of employees), technical maintenance, fair wages of employees and teachers. Discussion of additions and amendments to educational programmes based on the analysis of recommendations and suggestions of final exams, requests from healthcare organisations, proposals of teaching staff taking into account current trends in medicine and science.

The organisational structure of the KSCQZD is reviewed regularly in accordance with the ongoing reforms in education and healthcare of the Republic of Kazakhstan, changes in the practice of world educational management. Currently, the International Training Centre is being formed, the functional tasks of which are aimed at ensuring the quality of educational programmes. All types of the KSCQZD reports (reports on the implementation of the Strategic Plan, scientific projects, analysis on behalf of the leadership, reports on the efficiency and effectiveness of processes, self-evaluation reports in preparation for external evaluation, etc.) are brought to the attention of all stakeholders at meetings of the Academic Council.
All 2018-2022 functioning processes (managing, basic, supportive) are identified at the KSCQZD. In order to ensure continuous renewal and quality improvement, provision is made for the increase in figures set for implementation from 2018 to 2022. To create a positive and effective learning environment for trainees, the KSCQZD annually monitors feedback according to the Procedure for Assessing Customer Satisfaction by means of a questionnaire. Questionnaire results are analyzed.

To monitor the educational programme implementation and to identify emerging problems, including those related to resource support, the KSCQZD updates or develops new internal regulatory documents governing the monitoring and evaluation of programmes.

**Strengths:**

1. Regular professional development of teachers and specialists of the KSCQZD on continuing education cycles.
2. Continuing education of teachers and specialists of the KSCQZD by participating in seminars, master classes, conferences.
3. Active participation in scientific activities, domestic and foreign projects, writing articles, publications in domestic and foreign journals, issuing own journal.
4. Teachers and specialists of the KSCQZD can further undertake a master’s degree and PhD degree in Kazakhstan and abroad (in 2019, two KSCQZD specialists are defending their PhD theses at a viva voce at the Ludwig Maximilian University of Munich (Germany)).

**The EEC conclusions on the criteria:** comply - 5, partially comply - 0, do not comply - 0

**Standard 9: accomplished**

**Recommendations on improvement:** none
5. Recommendations on improvement of the operation of the RSE on the REM M. Aikimbayev Kazakh Scientific Centre for Quarantine and Zoonotic Diseases:

1. To adapt the mission and vision of the KSCQZD taking into account the educational direction of the organisation;
2. To improve the work of the KSCQZD in terms of identifying and informing stakeholders about the outcomes of training in continuing education programmes;
3. To bring the existing academic and methodical documentation in compliance with the requirements of the legal acts in continuing professional education (relevant population of trainees, document management, internal documents);
4. To expand the access of trainees of educational programmes to updated data of scientific results and practical experience (Internet resources, modern educational and innovative laboratory technologies);
5. To intensify work with HEIs and medical organisations to develop CPD programmes;
6. To keep up to date and expand the Internet resources of the KSCQZD (website, access to international scientific and educational websites);
7. To further develop innovative technologies using distance learning elements;
8. To bring the operation of the library in accordance with regulatory requirements;
9. To improve the process of monitoring and evaluating educational programmes (achievement of the mission, expected training outcomes, assessment methods, participation of individual health professionals in the CPD, the Regulation on CPD and educational resources).
Рекомендация Аккредитационному совету ЕЦА

Члены ВЭК пришли к единогласному мнению рекомендовать Аккредитационному совету аккредитовать РГП на ПХВ «Казахский Научный Центр Карантинных и Зоонозных Инфекций имени Мастута Айкимбаева» Министерства Здравоохранения Республики Казахстан статус институционально аккредитованной организации, реализующей программы дополнительного образования в области здравоохранения, на период 5 лет.

Председатель Внешней экспертной комиссии
Ибраева Гульмира Алпыспаевна

Зарубежный эксперт
Рыжкин Сергей Александрович

Национальный академический эксперт
Славко Елена Алексеевна

Эксперт – представитель специалистов здравоохранения (слушателей)
Жантуриев Болат Меирбекович

Эксперт – представитель работодателей
Абдрахмов Рашид Болатович

Наблюдатель ЕЦА
Умарова Макпал Альдикебовна
Recommendations for the ECAQA Accreditation Council

The EEC members unanimously agreed to recommend to the Accreditation Council to accredit the RSE on the REM M. Aikimbayev Kazakh Scientific Centre for Quarantine and Zoonotic Diseases of the Ministry of Healthcare of the Republic of Kazakhstan as an organisation implementing continuing education programmes in health care for a period of 5 years.

<table>
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<tr>
<th>Role</th>
<th>Name</th>
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<tr>
<td>The EEC Chairman</td>
<td>Gulmira Alpyspayevna Ibrayeva</td>
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<tr>
<td>Foreign Expert</td>
<td>Sergey Aleksandrovich Ryzhkin</td>
<td>/signature/</td>
</tr>
<tr>
<td>National academic expert</td>
<td>Yelena Alekseyevna Slavko</td>
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<tr>
<td>Expert-representative of health care professionals (trainees)</td>
<td>Bolat Meirbekovich Zhanturiyev</td>
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<td>Expert-representative of employers</td>
<td>Rashid Bolatovich Abdrasulov</td>
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</tr>
<tr>
<td>ECAQA Observer</td>
<td>Makpal Aldibekovna Umarova</td>
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Annex 1.

Quality profile and evaluation criteria of the RSE on the REM M. Aikimbayev Kazakh Scientific Centre for Quarantine and Zoonotic Diseases of the Ministry of Healthcare of the Republic of Kazakhstan for compliance with the Standards for Institutional Accreditation of Organisations for Continuing Professional Development (CPD) for Healthcare Professionals

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<td>8. Organisation</td>
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<td>9. Continuous renewal</td>
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