

Ministry of Health of the Kyrgyz Republic

Results of the self-assessment of essential public health operations in the Kyrgyz Republic

April–September 2016

Bishkek 2017



ABSTRACT

This report presents the results of Kyrgyzstan's self-assessment of the essential public health operations (EPHOs). The EPHO self-assessment was initiated by the Ministry of Health of the Kyrgyz Republic and conducted under the biennial collaborative agreement between the WHO Regional Office for Europe and the Government of Kyrgyzstan for 2016–2017. In addition to describing the assessment process, the technical report presents the key recommendations put forth by the Steering Committee and Specialized Teams.

KEYWORDS

ESSENTIAL PUBLIC HEALTH OPERATIONS
HEALTH POLICY
HEALTH SYSTEM PLANS – ORGANIZATION AND ADMINISTRATION
HEALTH SYSTEM REFORM
HEALTH SYSTEMS ASSESSMENT
HEALTH SYSTEM STRENGTHENING
PUBLIC HEALTH STRATEGY

Address requests about publications of the WHO Regional Office for Europe to:

Publications
WHO Regional Office for Europe
UN City, Marmorvej 51
DK-2100 Copenhagen Ø, Denmark

Alternatively, complete an online request form for documentation, health information, or for permission to quote or translate, on the Regional Office website (<http://www.euro.who.int/pubrequest>).

Design and layout: 4PLUS4.dk

© World Health Organization 2017

All rights reserved. The Regional Office for Europe of the World Health Organization welcomes requests for permission to reproduce or translate its publications, in part or in full.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either express or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. The views expressed by authors, editors, or expert groups do not necessarily represent the decisions or the stated policy of the World Health Organization.

Contents

Foreword	v
Note from Kyrgyzstan’s Deputy Minister of Health.....	vi
Acknowledgements	vii
List of abbreviations	ix
Executive summary.....	xi
Introduction	1
EPHO 1. Surveillance of population health and well-being.....	9
EPHO 2. Monitoring and response to health hazards and emergencies.....	19
EPHO 3. Health protection, including environmental, occupational, food safety and others.....	24
EPHO 4. Health promotion, including action to address social determinants and health inequity	33
EPHO 5. Disease prevention, including early detection of illness.....	41
EPHO 6. Assuring governance for health and well-being.....	45
EPHO 7. Assuring a sufficient and competent public health workforce.....	50
EPHO 8. Assuring sustainable organizational structures and financing.....	55
EPHO 9. Advocacy, communication and social mobilization for health	60
EPHO 10. Advancing public health research to inform policy and practice	63
Annex 1. List of priority recommendations	67



Foreword

I wish to sincerely congratulate the Ministry of Health of the Kyrgyz Republic for having completed this self-assessment. Since the very beginning of my tenure as the Director of Health Systems and Public Health at the WHO Regional Office for Europe, strengthening public health services has been at the top of my list of priorities. This takes place in the context of the European Action Plan for Strengthening Public Health Capacities and Services, the European health policy framework Health 2020 and the Sustainable Development Goals.

While life expectancy in the WHO European Region has increased by five years since the 1980s, profound health inequities persist, in particular between the western and eastern parts of the Region. The burden of disease has shifted over time to a predominance of noncommunicable diseases, and this shift is creating immense pressure on health systems. If nothing is done, it is estimated that the cost of health care will double by 2050.

Investing in public health interventions that address the underlying causes of ill health could mitigate much of this cost. World Health Assembly resolution WHA69.1 highlighted the importance of public health functions as one of the most cost-effective, comprehensive and sustainable ways of achieving universal health coverage and the Sustainable Development Goals. A number of countries in the Region have understood the importance of strengthening public health services and are willing to invest in reforms. After decades of focus on curative services, it is truly exciting to witness the growing emphasis the health policy community is placing on prevention, protection and promotion services.

I am proud to say that Kyrgyzstan is among those countries, and that WHO has played a role in supporting the Ministry of Health in assessing the essential public health operations. While the most important work of strengthening public health services in Kyrgyzstan still lies ahead, this assessment provides a solid foundation on which to base these efforts.

Sincerely,
Hans Kluge
Director of Health Systems and Public Health
WHO Regional Office for Europe



Note from Kyrgyzstan's Deputy Minister of Health

Improving policy for public health and well-being in Kyrgyzstan requires strengthening and developing public health services. Health service reform is carried out within the Den Sooluk national health care reform programme for 2012–2016, a continuation of the national health care reform programmes Manas (1996–2005) and Manas Taalimi (2006–2011).

Despite a number of achievements in the delivery of public health services under these previous programmes, considerable barriers remain. Contrary to expectations, significant improvements have not been achieved on a number of health indicators and health outcomes. The Den Sooluk programme now aims to ensure universal health coverage with quality health and sanitary-preventative services, regardless of social status, gender or access to insurance.

Kyrgyzstan actively supports and implements the European health policy framework Health 2020 and its accompanying action plan to strengthen public health capacities and services. Conducting a self-assessment of the essential public health operations was a necessary step to further this important work. The self-assessment, undertaken with the online version of the *Self-assessment tool for the evaluation of public health capacities and services* (2015), not only effectively evaluated activities in the health sector, it also indicated clearly that public health is a national priority.

The results of the self-assessment provide evidence of Kyrgyzstan's progress in implementing a consistent, science-based approach to public health, and serve as a tool for lobbying and political decision-making related to reforming and strengthening public health services. This will ultimately contribute to improving the quality of services delivery to the country's population.

Sincerely,

Oleg Gorin

Deputy Minister of Health and State Sanitary Doctor of the Kyrgyz Republic

Acknowledgements

The Ministry of Health of the Kyrgyz Republic conducted the self-assessment of essential public health operations with technical assistance from the World Health Organization (WHO) Regional Office for Europe. It wishes to express gratitude to the Regional Office, and in particular Jarno Habicht, WHO Representative in Kyrgyzstan; Martin Krayer von Krauss, Technical Officer; Maria Marcoulli, Consultant; Regina Winter, Consultant; and Oskonbek Moldokulov, Head of the WHO Country Office in Bishkek.

The Ministry of Health also extends sincere gratitude to the following members of the Oversight Committee for their invaluable contribution to the self-assessment process.

- A.M. Abarbekova** Head, Department of Financing and Planning of the Ministry of Health
- S.T. Abdikarimov** Chair, Kyrgyz Association of Public Health; Director, Republican Centre for Quarantine and Especially Dangerous Infections of the Ministry of Health
- O.V. Gorin** Deputy Minister of Health, Ministry of Health; Chairman, Oversight Committee for the EPHO self-assessment
- D.Z. Imanalieva** Unit Expert, Parliament Committee on Social Affairs, Education, Science, Culture and Public Health

Finally, the Ministry of Health is grateful to the following public health professionals for their active participation in data collection and working group discussions during the self-assessment.

- N. Altymysheva** Head of Hygiene, Epidemiology and Bacteriology, Kyrgyz State Medical Institute for Continuing Education
- B.K. Arykbaeva** Head of Noncommunicable Disease Prevention, Department of Disease Prevention and State Sanitary and Epidemiological Surveillance of the Ministry of Health
- D. Ashiralieva** Head of Laboratory, Department of Disease Prevention and State Sanitary and Epidemiological Surveillance of the Ministry of Health
- D.B. Bekbasarova** Deputy Chief Physician, Bishkek Centre for Disease Prevention and State Sanitary and Epidemiological Surveillance

D. Belev	Head of Epidemiology, Kyrgyz State Medical Academy
G.J. Djumagulova	Immunologist, Republican Centre for Immunoprophylaxis of the Ministry of Health
G.A. Djumalieva	Head, Republican Scientific and Practical Centre of Infection Control; Scientific and Production Centre for Preventive Medicine of the Ministry of Health
R.S. Dzhakypova	Consultant, Ministry of Health
A.E. Eraliev	Chief Physician, Kara-Suu Centre for Disease Prevention and State Sanitary and Epidemiological Surveillance
N.S. Esengulova	Lead Specialist, Public Health Office of the Ministry of Health
C.O. Isabekova	Deputy Director, Republican Centre for Health Promotion of the Ministry of Health
S.E. Karamurzinova	Chief Accountant, Department of Disease Prevention and State Sanitary and Epidemiological Surveillance of the Ministry of Health
R.T. Nurgaziev	Chief Physician, Tokmok Centre for Disease Prevention and State Sanitary and Epidemiological Surveillance
A.B. Ryskulbekova	Head of Department of Epidemiology, Bishkek Centre for Disease Prevention and State Sanitary and Epidemiological Surveillance
A.K. Shergalieva	Head of Planning and Analysis Unit, Republican Centre for Health Promotion of the Ministry of Health
S.T. Suranbaev	Epidemiologist, Department of Disease Prevention and State Sanitary and Epidemiological Surveillance of the Ministry of Health
S.M. Suvanalieva	Lead Specialist, Public Health Office of the Ministry of Health
N.T. Usenbaev	Head of Department of Quarantine Infections, Republican Centre for Quarantine and Especially Dangerous Infections of the Ministry of Health

List of abbreviations

CAH	Community Action for Health
CCPH	Coordinating Council on Public Health under the Government of the Kyrgyz Republic
DDPSSES	Department of Disease Prevention and State Sanitary and Epidemiological Surveillance of the Ministry of Health
EAEU	Eurasian Economic Union
EACU	Eurasian Customs Union
EPHO	Essential public health operation
EVAP	European Vaccine Action Plan
F	Financing
G	Governance
GAVI	Global Alliance for Vaccines and Immunization
GIS	Geographical information system
HPU	Health promotion unit
ICD-10	International Classification of Diseases, 10th revision
ICT	Information and communication technologies
IHR	International Health Regulations
KSMA	Kyrgyz State Medical Academy
MDGs	Millennium Development Goals
MoH	Ministry of Health of the Kyrgyz Republic
NCDs	Noncommunicable diseases
NSC	National Statistical Committee
PHO	Public Health Office of the Ministry of Health
RCHP	Republican Centre for Health Promotion of the Ministry of Health
RCI	Republican Centre for Immunoprophylaxis of the Ministry of Health
RCQEDI	Republican Centre for Quarantine and Especially Dangerous Infections of the Ministry of Health
RG	Resource generation, including human resources, medicines and technology, and/or information and technological research
RMIC	Republican Medical Information Centre of the Ministry of Health
SAEPF	State Agency for Environmental Protection and Forestry
SD	Services delivery
SIVPS	State Inspectorate for Veterinary and Phytosanitary Security
SPCPM	Scientific and Production Centre for Preventive Medicine
UNICEF	United Nations Children's Fund
VHC	Village health committee
WHO	World Health Organization
WHO FCTC	WHO Framework Convention on Tobacco Control



Executive summary

Kyrgyzstan's self-assessment of the essential public health operations (EPHOs) was initiated by the Ministry of Health of the Kyrgyz Republic and conducted under the biennial collaborative agreement between the WHO Regional Office for Europe and the Government of Kyrgyzstan for 2016–2017.

This technical report presents the key results of the self-assessment of the following 10 EPHOs.

- EPHO 1:** Surveillance of population health and well-being
- EPHO 2:** Monitoring and response to health hazards and emergencies
- EPHO 3:** Health protection, including environmental, occupational, food safety and others
- EPHO 4:** Health promotion, including action to address social determinants and health inequity
- EPHO 5:** Disease prevention, including early detection of illness
- EPHO 6:** Assuring governance for health and well-being
- EPHO 7:** Assuring a sufficient and competent public health workforce
- EPHO 8:** Assuring sustainable organizational structures and financing
- EPHO 9:** Advocacy, communication and social mobilization for health
- EPHO 10:** Advancing public health research to inform policy and practice

The self-assessment revealed that Kyrgyzstan still faces considerable challenges in these areas. The country scored 53% overall, with no single EPHO exceeding a score of 66%. Scores were lowest for EPHOs 2 and 10 (35%), EPHO 6 (45%) and EPHO 8 (52%).

Based on these results, the working group of the Ministry of Health developed a set of priority recommendations. These are summarized below (see also Annex 1).

- EPHO 1:** Strengthen intersectoral action and develop an intersectoral strategy to address antimicrobial resistance.
- EPHO 2:** Develop capacity to assess emergency risk using new technologies such as geographic information systems to map sources of acute and dangerous infections and to rank them.
- EPHO 3:** Develop the national programme on labour protection and legislation to ensure intersectoral collaboration for the protection of workers' health.
- EPHO 4:** Provide regular public education on healthy lifestyles through the country's village health committees.
- EPHO 5:** Develop a national immunization programme with an action plan and budget for 2018–2022.
- EPHO 6:** Develop a national strategy and relevant legislation for improving public health services.
- EPHO 7:** Develop regulations to strengthen the responsibilities of graduates and employers to attract public health specialists at the primary health care level. Develop qualification requirements for public health professionals, as well as workload norms.
- EPHO 8:** Under the public health services strategy develop a mechanism for reinvesting saved funds into the public health system.

- EPHO 9:** Develop guidelines on communication for the public health service, including for risk management.
- EPHO 10:** Review the mandate and title of the Scientific and Production Centre for Preventive Medicine and reorganize it into the Scientific Research Institute on Public Health to cover the entire range of public health operations.

Introduction

BACKGROUND TO KYRGYZSTAN'S SELF-ASSESSMENT

Kyrgyzstan's state health policy is based on the Constitution of the Kyrgyz Republic, the Labour Code and the laws "On the protection of health of the citizens of the Kyrgyz Republic", "On public health", "On the reproductive rights of citizens", "On measures for preventing harm to children's health and physical, intellectual, mental, spiritual and moral development", "On the sanitary and epidemiological well-being of the population", "On the protection of Kyrgyz citizens' health from the harmful effects of tobacco", "On labour protection", "On traffic in the Kyrgyz Republic" and "On mental health".

Kyrgyzstan's national strategy for sustainable development for 2013–2017 aims to take concrete actions to establish a model of sustainable development that is supported financially and with other key resources. Public authorities, local government and civil society all are involved in the strategy's implementation.

The Coordinating Council on Public Health (CCPH) was established under the Government in 2014. It coordinates interagency cooperation for improving and managing health determinants, and binds stakeholders to implementing decisions taken at CCPH meetings. This enables various structures and agencies to take positive measures to improve health determinants.

The activities of the country's public health system are aimed not only at implementing state sanitary and epidemiological surveillance and control, but also at introducing new approaches to addressing problems related to the socioeconomic determinants of health (poverty, migration, alcohol and narcotic abuse, tobacco use, poor nutrition, inadequate water supply, injuries, stress and infections). The public health system also tracks population health status through the study and analysis of demographic indicators, morbidity and mortality.

These efforts necessitate an understanding of the factors that affect people's health, including environment, climate, geography, living conditions, mentality and social security. They foster new types of partnerships and the engagement of civil society, and also increase the public health system's preparedness for new threats and emergencies.

The Kyrgyz public health system's multifaceted work is focused on the needs of the population. It is based on broad, cross-sectoral cooperation and the active participation of society in the Government's health protection and promotion efforts. There is sufficient political commitment to protecting public health as a national priority.

Government Decree No. 11 (21 January 2013) approved the national strategy for sustainable development for 2013–2017. The Government also enacted the Den Sooluk national health care reform programme for 2012–2016, the strategy for public health protection and promotion until 2020 (the national Health 2020 strategy), the national programme for the prevention and control of NCDs for 2013–2020, and a number of other programmes and policies in the areas of nutrition, water supply, road safety and injury prevention, etc.

The effectiveness of these programmes depends largely upon the attitude of citizens to their own health protection and that of others, on their active participation in implementing preventive measures, and how they use the opportunities provided to them for maintaining and strengthening health. As such, effective infrastructure for prevention must include robust communication networks and should ensure cooperation with all sectors of society.

SELF-ASSESSMENT PROCESS

The self-assessment of the essential public health operations (EPHOs) in Kyrgyzstan was initiated by the Ministry of Health of the Kyrgyz Republic (MoH) and conducted under the biennial collaborative agreement between the WHO Regional Office for Europe and the Government of Kyrgyzstan (2016–2017). The ultimate goal of the MoH was to use the self-assessment process as an opportunity to develop recommendations for further implementing the Den Sooluk health care reform programme.

SELF-ASSESSMENT TOOL

Kyrgyzstan's 2016 self-assessment was undertaken with *The Self-assessment tool for the evaluation of essential public health operations in the WHO European Region* (2015). This updated version differs from other tools in its reorganized list of functions that take into account the aspects of management, financing and human resources. Based on the whole-of-government, whole-of-society approach of the European policy framework Health 2020 and the European Action Plan to Strengthen Public Health Capacities and Services, the self-assessment tool does not limit the activities of public health to health services alone.

The working group used an online version of the tool, and employed the following ranking system for resulting scores:

- 0–20%: EPHO is not developed
- 21–40%: EPHO is underdeveloped
- 41–60%: EPHO is moderately development
- 61–80%: EPHO is well developed
- 81–100%: EPHO is sustainable.

For each EPHO, the self-assessment identified one or more areas for improvement. These are indicated as follows:

- G: governance
- F: financing
- RG: resource generation, including human resources, medicines and technology, and/or information and technological research
- SD: services delivery.

PREPARATORY STAGE OF THE SELF-ASSESSMENT

Kyrgyzstan's first EPHO assessment was carried out in 2011. In March 2016, experts from the Regional Office conducted a technical visit to Kyrgyzstan as part of the biennial collaborative agreement for 2014–2015. Upon completion of the visit, the expert group presented recommendations to the MoH indicating the necessity of conducting a second EPHO assessment.

The first working meeting for the second self-assessment took place on 16 December 2015. Participants determined membership for the following groups, which were approved by MoH Order No. 1 (1 April 2016): the Oversight Committee, the Secretariat, and an expert group for each of the 10 EPHOs.

The 10 EPHO expert groups received training in using the online self-assessment tool during the working meeting. Afterwards, they discussed roles, responsibilities and scope of work, as well as criteria for evaluating their experience of using the tool. They reviewed potential obstacles that could affect the completeness of the information collected, and actions that they could take to overcome them. This established a precedent for broad discussion that continued throughout the process of collecting information and filling in the online forms.

Participants also elected a coordinator for each expert group and established a timeline for completing the stages of the self-assessment.

PHASE I OF THE SELF-ASSESSMENT: DATA COLLECTION, ENTRY AND ANALYSIS

Each EPHO expert group consisted of 3–4 members. Expert group coordinators were responsible for facilitating discussions within the group and for filling in the online tool; for this purpose each coordinator received a personal login.

Data collection, entry and analysis took longer than initially planned. This was due to the fact that many areas covered in the self-assessment lie within the scope of work of bodies other than the MoH, including the Ministry of Internal Affairs; the Ministry of Emergency Situations; the Ministry of Labour and Social Security; the Ministry of Agriculture and Melioration; the State Agency for Environmental Protection and Forestry (SAEPF); the State Agency for Youth Affairs, Physical Culture and Sports; the State Migration Service; and the State Border Service.

To collect information, expert group members contacted representatives of these and other ministries and agencies to develop official inquiries and meet with them for interviews. They also met as a group on a regular basis to discuss the information they had collected and to enter it into the online tool. Members of other expert groups, as well as specialists in relevant areas, attended these discussions as well.

The Secretariat evaluated the quality and completeness of the information being uploaded into the online tool. It also organized working meetings for expert group coordinators within the Public Health Office of the MoH (PHO) to discuss issues that arose at various stages of the self-assessment.

PHASE II OF THE SELF-ASSESSMENT: PRIORITIZATION OF RECOMMENDATIONS

Following data entry and the development of recommendations, the EPHO expert groups focused on prioritizing these recommendations. This took place at a two-day meeting organized by the Secretariat in coordination with the MoH and the Oversight Committee.

Prior to the meeting, the Secretariat drafted a set of instructions for this process that was endorsed by the MoH. It then distributed reference materials to the expert groups that included guidelines and objectives for prioritization. The groups familiarized themselves with these materials and prepared presentations.

In the first stage of the meeting, participants received instructions and individual templates for submitting responses, including a set of scorecards. The leader of each expert group then presented the recommendations for that EPHO. Participants discussed each recommendation and its wording, and proposed alternatives based on the findings. Using a five-score scale, they rated each recommendation based on the level of effort needed for its implementation and its potential impact.

In the second stage of the meeting, a group facilitator collected the scorecards and gave them to a coordinator who calculated the average score using an Excel spreadsheet and entered them into the online tool. This produced a ranked list of recommendations, which was then grouped into four categories according to effort required and potential impact.

The third and final stage of the meeting entailed reaching consensus on high-priority recommendations. This involved considering only those recommendations that fell into the following two categories:

1. quick wins: low-effort, high-impact actions
2. strategic initiatives: high-effort, high-impact actions.

Expert group members decided not to include all recommendations on the final list, which will be shared for decision-making (see Annex 1). As a follow-up action, a plan of efforts with lists of associated recommendations will be developed for the MoH to strengthen public health capacities and services.

ROLES AND RESPONSIBILITIES FOR THE SELF-ASSESSMENT PROCESS

The roles and responsibilities established for the self-assessment process are outlined in Table 1.

Table 1. Roles and responsibilities for the self-assessment process

Teams	Members	Responsibilities
Oversight Committee	A.M. Abarbekova, Head of the Financing and Planning Department of the Ministry of Finance S.T. Abdikarimov, Chairman of the Kyrgyz Public Health Association; Director of the Republican Centre for Quarantine and Especially Dangerous Infections of the MoH (RCQEDI) O.V. Gorin, Deputy Minister of Health; Chairman of the Oversight Committee D.Z. Imanalieva, Unit Expert under the Parliament Committee on Social Affairs, Education, Science, Culture and Public Health	Agreeing, coordinating, appointing and approving members to the Secretariat and EPHO expert groups; reviewing draft reports; ensuring the transparency of the self-assessment process
Secretariat	D.A. Bayzbekova, Deputy Director of Research at the Scientific and Production Centre for Preventive Medicine (SPCPM) B.A. Ismailova, Head of the PHO	Building a roadmap and timelines for the self-assessment; developing assignments and tasks for the expert groups and coordinating their results
EPHO expert groups	10 groups of 3–4 experts	Carrying out the self-assessment and preparing and submitting the group report to the Secretariat

STAKEHOLDERS IN THE SELF-ASSESSMENT PROCESS

Stakeholders in the self-assessment process included the following:

- CCPH;
- Department of Disease Prevention and State Sanitary and Epidemiological Surveillance (DDPSSES);
- Department of Drug Supply and Medical Equipment;
- Kyrgyz Association of Public Health;
- Kyrgyz–Russian Slavic University;
- Kyrgyz State Medical Academy (undergraduate level) (KSMA);

- Kyrgyz State Medical Institute for Continuing Education (postgraduate level and continuing education);
- Parliament Committee on Social Affairs, Education, Science, Culture and Public Health;
- PHO;
- RCQEDI;
- Republican AIDS Centre and regional and municipal AIDS centres;
- Republican Centre for Health Promotion (RCHP);
- Republican Centre for Immunoprophylaxis (RCI);
- Republican Centre for Mental Health;
- Republican Centre for Narcology;
- SPCPM; and
- district and provincial centres of disease prevention and sanitary–epidemiological surveillance.

Other involved ministries and departments included:

- Ministry of Agriculture and Melioration;
- Ministry of Emergency Situations;
- Ministry of Interior Affairs;
- Ministry of Labour and Social Development;
- SAEPF;
- State Agency for Youth Affairs, Physical Culture and Sports;
- State Border Service;
- State Migration Service; and
- other international multilateral and bilateral partners and donors.

QUALITY CONTROL OF THE SELF-ASSESSMENT PROCESS

The Oversight Committee and the Secretariat monitored the quality of both the self-assessment process (see Fig. 1) and the results (see Fig. 2) according to criteria outlined in the online tool.

Fig. 1. Quality control for the self-assessment process

The screenshot shows the 'Process quality assessment criteria' interface. It features the WHO logo and navigation options. The main content area displays two criteria, each with a dropdown menu and a list of examples of indicators.

Deliberative: are efforts made to encourage group discussions within the specialized teams, the core secretariat and the oversight committee?

Examples of Indicators

- A policy dialogue is held to debate the implications of the assessment with key stakeholders.
- Debate and scrutiny are encouraged at meetings of the specialized teams, the core secretariat and the oversight committee.
- A minimum of two people are assigned to any given specialized team.
- Facilitators are designated in order to moderate discussions and debates.
- Divergences of opinion are clarified, and the merits of one position over the other are debated.
- Consensus is not forced upon the group – minority opinions are respected and recorded.

Inclusive: is a broad range of opinions included in the membership of specialized teams and the oversight committee, and are efforts made to elicit the opinions of all of the members of the group?

Examples of Indicators

- A systematic survey is performed ahead of the process to identify interested and competent parties.
- The opinions of the spectrum of interested and competent parties are represented in the relevant parts of the process.
- Relevant information and documents are made accessible to all participants.
- Measures are taken to ensure that the opinions of powerful actors do not unduly dominate the assessment process. For example, facilitators are designated in order to moderate discussions and debates.

Fig. 2. Quality control for self-assessment results

The screenshot shows the 'Quality control for self-assessment results' interface. It displays two criteria, each with a dropdown menu and a list of examples of indicators.

Transparent: are key aspects of the assessment, such as the membership of various committees and the basis for the conclusions they arrive at, clearly documented, made public and disseminated?

Examples of Indicators

- The basis for any substantial disagreements encountered as well as the rationale underlying the consensus reached is clearly documented in the report.
- The membership of the oversight committee, the core secretariat and the specialized teams is clearly documented in an annex to the report.
- The report is published and disseminated.
- Public communications are issued to draw attention to the assessment process and its outcomes.
- A policy dialogue is organized to deliberate on the implications of the conclusions and recommendations of the assessment.

Actionable: does the assessment result in realistic recommendations that can be understood and implemented by decision makers and senior administrators?

Examples of Indicators

- The assessment report includes an executive summary for policy makers.
- The assessment report includes a limited number of policy options that decision makers could implement to build on the results of the assessment.
- The assessment report includes recommendations that Senior Officials can implement to build on the results of the assessment.
- Options are described in terms of the pros and cons, costs and if relevant, stakeholder views on the options.

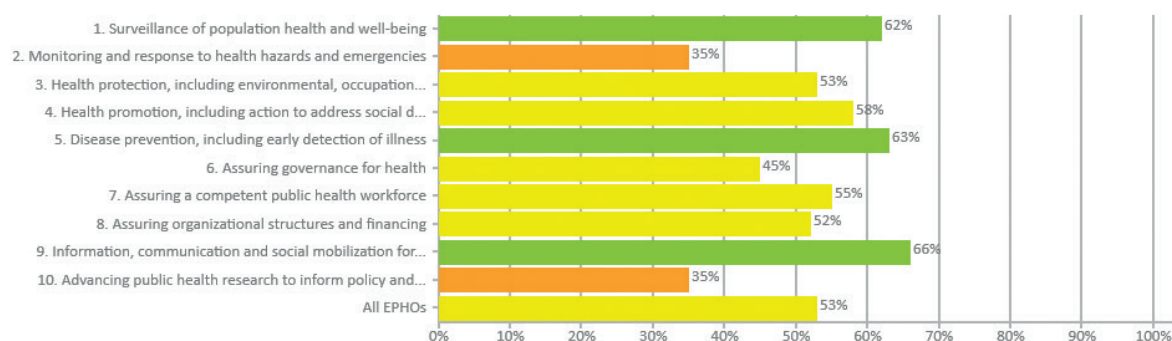
SELF-ASSESSMENT TIMELINE

The self-assessment was conducted between May and September 2016. Partnership meetings to discuss the MoH's plan for strengthening public health services were held in November 2016.

OVERALL RESULTS OF THE SELF-ASSESSMENT PROCESS

The self-assessment revealed that, despite ongoing initiatives and measures to strengthen public health, Kyrgyzstan still faces significant challenges in implementing the EPHOs. The country scored 53% overall, with no single EPHO exceeding a score of 66% (see Fig. 3). The most underdeveloped were EPHO 2 and EPHO 10 (35%), followed by EPHO 6 (45%) and EPHO 8 (52%).

Fig. 3. Results of the self-assessment by EPHO



EPHO 1. Surveillance of population health and well-being

OVERVIEW

The protection of the health of Kyrgyzstan's population is stipulated in the Constitution of the Kyrgyz Republic and its laws. The laws "On state statistics" and "On the census of the population and the housing fund" set processes for collecting data on population health status. The National Statistical Committee (NSC) approves forms for statistical and electronic reporting by industry and sector, as well as classifiers.

Demographic data is collected according to the NSC-approved forms. Form 1 is filled in by the Bureau of Vital Statistics of each district and town; Form 2 by the State Register Services under the Government; and Form 3 by village aymaks. The Republican Medical Information Centre of the MoH (RMIC) is responsible for birth and death registers.

The forms must be filled in on annual basis and submitted in electronic format to the NSC, which houses the database. Statistical data are published annually in the Demographic Yearbook, which contains all data on administrative/territorial regions; population size; age, sex and ethnic composition of the population; population distribution; births and deaths; marriages and divorces; and migration. Data on the deceased are aggregated by sex and main causes of death. Data on morbidity are collected in accordance with the International Classification of Diseases, tenth revision (ICD-10).

The NSC and the MoH, together with international organizations, conducts research within the framework of the Kyrgyz Integrated Household Survey to study the health status of the population. With support from the United Nations Children's Fund (UNICEF), the survey assesses level of access to water, sanitation and hygiene in schools and hospitals in the northern regions of Kyrgyzstan (Issyk-Kul, Naryn and Talas regions/oblasts).

Statistical data on mortality is collected according to ICD-10 by, for example, sex, age and urban/rural residence. The following causes of death are registered: noncommunicable diseases (NCDs), infectious diseases, maternal and child mortality, injuries, and road traffic accidents.

Child mortality pertains to children up to five years of age. The child mortality rate is calculated per 1000 live births. The at-home mortality rate among children under two years of age is also registered.

Epidemiological surveillance of infectious diseases is conducted on the basis of regulatory documents, including the laws "On public health", "On immunoprophylaxis", "On the protection of the population from tuberculosis" and "On AIDS prevention in the Kyrgyz Republic", as well as Government Resolution No. 583 "On the accounting of infectious diseases" (23 September 2011).

Kyrgyzstan now has computer-based tracking of infectious and parasitic diseases; detected cases are reported automatically by the electronic system.

The country carries out epidemiological surveillance of 38 forms of infectious and parasitic diseases. Recording and registration is carried out in compliance with the law “On public health” and the Government resolution “On recording and registering infectious diseases”.

In the area of vaccination, the country has approved a national programme on immunization for 2013–2017 and established the laws “On immunoprophylaxis of communicable diseases” and “On amendments to the law on immunoprophylaxis of communicable diseases”. Children and adults are vaccinated according to the national immunization schedule.

Epidemiological surveillance of NCDs is carried out for newly detected cases of endemic goitre and iron-deficiency anaemia. NCDs are the major cause of population disability, morbidity and premature mortality in Kyrgyzstan. According to the RMIC, cardiovascular diseases (52.8%) are the leading cause of mortality in the country, followed by injuries and poisoning (10.1%), neoplasms (9.4%) and respiratory diseases (7.2%).

With technical assistance from WHO, the MoH piloted the WHO PEN protocols – the package of essential NCD interventions for primary health care in low-resource settings – in 10 family medicine centres. After assessing the pilot programme, the MoH will consider scaling up the interventions across the country.

In compliance with the MoH order “On conducting the WHO STEPS survey on epidemiological surveillance of noncommunicable disease risk factors in the Kyrgyz Republic” (12 October 2013), a team conducted the survey in all regions of the country to determine the reasons behind men’s low levels of primary health care utilization and disease awareness. Selective surveys on tobacco, alcohol and narcotic use as well as biological risk factors for hypertension, diabetes and iron-deficiency anaemia also collected information on risk factors and health determinants.

Maternal and child health is one of Kyrgyzstan’s public health priorities, and a main priority area in the Den Sooluk health care reform programme. Activities related to maternal and child health are envisaged in both the Den Sooluk programme and the Safe Motherhood Communication Strategy, which covers the issues of salt iodization and flour fortification.

Law No. 11 “On the organization of meals for secondary school pupils” (20 June 2002) stipulates the feeding of schoolchildren. Overall, 56.3% of schools provide hot meals for their students; 508 secondary schools have a buffet (an improved menu); and 735 schools have canteens on adapted premises. It is impossible to offer hot meals at all schools, as 30.5% of schools lack a centralized water supply and 80% are either not connected to central sewage or have facilities that are in need of major repairs.

The Den Sooluk programme places a particular emphasis on women’s maternal and reproductive health. This covers areas such as incidences of specific diseases in women; women’s health during pregnancy, childbirth and the postpartum period; proportion of pregnant women with anaemia; abortions; and diseases that complicate delivery and the postpartum period.

Government Decree No. 225 (16 November 2011) states that an individual's social well-being and mental health should be assessed when they apply for a driver's licences for any type of transport; when they enrol as a staff member within the Ministry of Education and Sciences, the Ministry of Interior Affairs, the Armed Forces, etc.; or upon request of the population.

Surveillance of environmental health is conducted according to the resolution "On approval of the regulation on state control in the field of environmental protection and use of natural resources" (1992). This resolution authorizes the following institutions to undertake surveillance and control in the field of environmental protection:

- DDPSES
- Ministry of Internal Affairs
- SAEPF
- State Inspectorate for Supervision of Safety in Industry and Mining.

Surveillance is carried out according to the law "On environmental protection", and covers air, water, soil and residential buildings. Air is monitored for chemical, physical and biological safety indicators. Water is monitored for physical, chemical and biological safety indicators on the basis of the law "On water" and the technical regulation "On drinking water". Soil is monitored for physical, chemical and biological safety indicators around children's health care and education institutions, health care institutions and organizations, and within facilities providing curative mud applications.

To monitor environmental risk, annual data are collected on tailings (toxic wastes), forest fires, air pollution emissions and wastewater discharges.

Traffic safety is monitored according to the laws "On road traffic in the Kyrgyz Republic" and "On roads", and the Government resolution "On traffic rules". Data are collected on the number of traffic accidents and number of victims, and categorized according to type of transport, involvement of a pedestrian, drink-driving, etc. Reports on traffic accidents are compiled by the Main Road Safety Department of the Ministry of Internal Affairs and are submitted to the NSC on a quarterly and annual basis.

The law "On social and legal protection from violence in the family" includes stipulations on monitoring injuries and cases of violence. Evaluation of injuries associated with morbidity, including road traffic injuries, in children and adults is performed by health care organizations on the basis of reporting forms No. 14 and No. 12. The Forensics Bureau also analyses data on victims, those accused and other people referred by law-enforcement agencies. The Main Road Safety Department is responsible for preventing, recording, reporting and analysing injuries and road traffic accidents.

Statistical reporting within the Main Road Safety Department was introduced in 2006, as approved by Ministry of Internal Affairs Order No. 388 "On the registration of cases of domestic violence" (7 October 2004). In spite of these endeavours, the population remains unaware of their rights. There are no judges specializing in family violence in the country, and no coordinating body for the protection of the population against violence.

Nosocomial infections are registered on the basis of the regulatory and legal documents of the MoH. Expedient/emergency notifications of infections are reported according to Government Resolution No. 583 (23 September 2011). Infection control specialists of health care organizations investigate isolated cases of inflammatory/purulent infections.

In the event of a local disease outbreak (3 or more cases with one source or registered within one incubation period and detected within one health care institution), an epidemiological report is submitted to the regional centre for disease prevention and state sanitary and epidemiological surveillance in order to access methodological and practical assistance.

There is no single strategy for fighting antimicrobial resistance in Kyrgyzstan. Antibiotics were readily available in pharmacies without prescriptions until 2017, when a governmental decree came into force mandating the sale of antibiotics by prescription only. Laboratories in Kyrgyzstan are not sufficiently outfitted with supplies and equipment to perform tests on antibiotic susceptibility.

Kyrgyzstan has not yet developed a strategy for health maintenance and delivery of health services to members of the population working outside the country. This creates difficulties in monitoring the health of migrants.

The protection of public health is reflected in the laws “On the health insurance of the citizens of the Kyrgyz Republic”, “On health protection of the citizens of the Kyrgyz Republic”, “On the single-payer system in health care financing”, “On health care organizations in the Kyrgyz Republic” and “On public health” as well as related Government resolutions. However, health care organizations face high rates of staff turnover due to low wages. Insufficient materials and technical capacities within health care organizations in remote and rural areas also limit local populations’ access to health care. Low population awareness of diseases and their consequences further aggravate this situation.

In spite of the law “On occupational safety” and the Labour Code, there is no common strategy for the protection of workers in Kyrgyzstan. Medical examination of workers’ health in the public/state sector is carried out in compliance with Government Resolution No. 285 “On approval of regulatory–legal acts of the Kyrgyz Republic in the field of public health” (16 May 2011). The Resolution provides a list of approved jobs and sets out mandatory preliminary and periodic medical examinations of employees. The MoH set up an interdepartmental working group to amend this Resolution.

In general, Kyrgyzstan’s health care budget is underfinanced. The national budget allocates 10.2% of funds to health care, the equivalent of 52.63 som (US\$ 1 = 69.4 som) per person. Informal out-of-pocket payments comprise 2.7% of total health expenditure, and 80% of payments for purchasing medicines.

Medical and preventive health care is provided to the population by 182 hospitals with a total of 25 789 beds; 65 family medicine centres with a total of 279 family group practitioners; 1020 feldsher–midwifery points; and 128 first aid stations. The number of visits to ambulatory health care facilities, including family medicine centres, family group practitioners and feldsher–midwifery points, totals 6 862 042 per year.

Currently, the staffing level of hospitals is 95.0% for doctors and 97.0% for nurses. The staffing level of feldsher–midwifery points is 87.2%. The staffing level for family group practitioners is 87.3%. Primary health care facilities in rural areas are understaffed by 38.9%, and an estimated 40.7% of health care workers will retire in the next few years.

Four universities and 11 colleges in Kyrgyzstan provide medical education and training. However, 62% of graduates transition into other sectors after completing their two–year clinical residency and internship due to low wages in the field. In addition, many young specialists do not want to work in rural areas.

As stipulated in the Den Sooluk programme, health care organizations provide preventive services. Currently, contraception coverage is at 33.0%; antenatal care (1 or more visits) is at 78.1%; skilled birth attendance is at 99.2%; diphtheria, tetanus and pertussis immunization coverage of children under one year of age is at 96.0%; and adults and children receiving antiretroviral therapy out of the total number of those in need is at 88.2%.

Despite this, according to the NSC’s section on confidence in health care, patient satisfaction is only at 26.1%.

Kyrgyzstan has a national policy on medicines for 2014–2020, as well as a strategy and regulations on medicines. It monitors access to essential medicines and medical products or devices both in public and private health institutions. Law No. 23 (1 February 2010) is the current law on medicines, and a new law was recently drafted. Government Decree No. 376 (8 July 2015) approved a programme on the circulation of medicines for 2014–2020.

Government Decree No. 693 (10 September 2012) approved Kyrgyzstan’s list of 20 essential medicines. Decree No. 743 (27 October 2015) also approved the building of an electronic database of medicines and medical products for 2016–2020.

Some essential medicines are not available in Kyrgyzstan for a number of reasons, including the following.

- There is a limited demand for medicines used to treat rare diseases (so-called orphan drugs).
- The majority of the population has limited purchasing power, making it difficult for them to access expensive medicines needed to treat severe diseases. The treatment of these diseases becomes a heavy burden on patients and their families, or becomes inaccessible. As the availability of these medicines in the local market is limited, patients must frequently purchase them from outside the country using out-of-pocket payments.
- There is low demand for some affordable and effective essential medicines due to changes in physicians’ prescribing practices. This occurs for various reasons, including pressure from or lobbying by some pharmaceutical companies.

Currently, the essential medicines list does not include approximately 10 affordable and effective medicines; not having been officially registered with Kyrgyzstan’s Drug Regulation Authority, these are unavailable on the market.

Public procurement comprises 30% of the pharmaceutical market’s total sales.

The DDPSES includes 51 organizations with their own laboratories, six of which participate in an external quality assessment and assurance programme.

The country has not yet developed a strategy for the development of medical tourism, and no monitoring system is in place for this. The population has poor access to medical services abroad. Currently, there is some experience in the area of referring patients with complex pathologies to leading clinics in Turkey through the MoH with the support of the Turkish Embassy in Kyrgyzstan (about 100 patients are identified by the Turkish Embassy and 100 by the MoH). Specialists monitor the health conditions of patients treated abroad via country visits or online consultations.

The MoH pursues the state policy in the area of health protection. It participates in the planning process, taking into account all socioeconomic, demographic, epidemiological and other data. The country has a strategy for health system development, as well as related laws and the Constitution of the Kyrgyz Republic. However, the health system is underfunded and health care infrastructure is underdeveloped (that is, buildings are ageing and lack modern equipment, and fixed assets are depreciating).

The country has identified a coordinating body for the implementation of the International Health Regulations (IHR), but the draft resolution is currently pending approval. Kyrgyzstan's IHR Implementation Plan envisages all opportunities and conditions for the work ahead, including a preparedness and response plan, trainings, and interactions with stakeholders and concerned ministries and departments.

The MoH is involved in global and national development programmes, including the Millennium Development Goals (MDGs). Within the MDG framework, Kyrgyzstan has implemented projects on, for example, the control of AIDS and tuberculosis.

SUMMARY OF ASSESSMENT RESULTS

Overall, EPHO 1 received a score of 62%, indicating that it is well developed (see Fig. 4 and Table 2).

Kyrgyzstan's well established system for collecting health data (1.A; 83%) is hindered mainly by a lack of health-related surveys (60%). In terms of surveillance of population health and disease programmes (1.B; 59%) and surveillance of health system performance (1.C; 54%), the most problematic areas are public health surveillance of antibiotic resistance (10%) and public health surveillance of occupational health (20%). Other weakly developed areas include monitoring of access to essential medicines (30%) and public health surveillance of migrant health (40%).

Additional areas that require strengthening (those with a score of 50%) are: public health surveillance of child health and nutrition; public health surveillance of communicable diseases; public health surveillance of NCDs; participation in and compliance with NCD monitoring reports; public health surveillance of injuries and violence; monitoring of health care utilization, performance and user satisfaction; and monitoring of health systems financing.

Fig. 4. Assessment results for EPHO 1 (%)

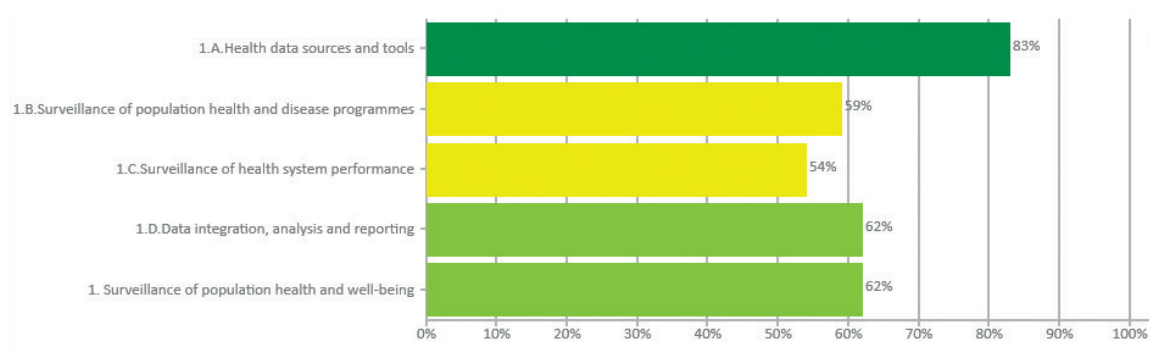


Table 2. Results of EPHO 1 assessment by subfunction (%)

Number	Subfunction	Score (%)
1.A.	Health data sources and tools	
1.A.1.	Civil registration and vital statistics system	100%
1.A.2.	Health-related surveys	60%
1.A.3.	Health management information systems	90%
1.A.4.	Diseases registries	80%
1.B.	Surveillance of population health and disease programmes	
1.B.1.	Cause-specific mortality	80%
1.B.2.	Selected morbidity	80%
1.B.3.	Public health surveillance – risk factors and determinants	80%
1.B.4.	Public health surveillance – child health and nutrition	50%
1.B.5.	Public health surveillance – maternal and reproductive health	70%
1.B.6.	Public health surveillance – immunization	80%
1.B.7.	Public health surveillance – communicable diseases	50%
1.B.8.	Public health surveillance – NCDs	50%
1.B.9.	Public health surveillance – social and mental health	70%
1.B.10.	Public health surveillance – environmental health	70%
1.B.11.	Public health surveillance – occupational health	20%
1.B.12.	Public health surveillance – road safety	70%

Number	Subfunction	Score (%)
1.B.13.	Public health surveillance – injuries and violence	50%
1.B.14.	Public health surveillance – nosocomial infections	80%
1.B.15.	Public health surveillance – antibiotic resistance	10%
1.B.16.	Public health surveillance – migrant health	40%
1.B.17.	Public health surveillance – health inequalities	60%
1.C.	Surveillance of health system performance	
1.C.1.	Monitoring of health system financing	50%
1.C.2.	Monitoring of health workforce	70%
1.C.3.	Monitoring of health care utilization, performance and user satisfaction	50%
1.C.4.	Monitoring of access to essential medicines	30%
1.C.5.	Monitoring of cross-border health	70%
1.D.	Data integration, analysis and reporting	
1.D.1.	Health sector analysis	70%
1.D.2.	Provision of updates on compliance with IHR	60%
1.D.3.	Participation in and compliance with NCD monitoring reports	50%
1.D.4.	Development of annual health statistical reports	60%
1.D.5.	Monitoring and reporting on regional or global health and development movements, such as MDGs, Post-2015 Development Agenda and universal health coverage	70%

Key recommendations

- Develop national strategies on strengthening the surveillance of chronic renal disorders and cardiovascular diseases (1.B.2).
- Include issues on the regulation of environmental risks in the agenda of the CCPH (for example, reforestation projects, treatment of radioactive/toxic tailings or air contamination, etc.) (1.B.3).
- **Priority recommendation (low effort–high impact):** Strengthen intersectoral action and develop an intersectoral strategy to address antimicrobial resistance (1.B.15).

STRENGTHS, WEAKNESSES AND AREAS FOR IMPROVEMENT

1.A. Health data sources and tools

Strengths: The country has a well established system of civil registration and vital statistics. This is based on an efficient regulatory and legislative framework that features a clear delineation of information flows and systems.

Weaknesses: Insufficient funding and high turnover of skilled personnel are both barriers to developing disease registries and conducting surveys on population health status.

Areas for improvement: F; RG; SD

1.B. Surveillance of population health and disease programmes

Strengths: The country has a legislative framework for epidemiological surveillance with clearly defined functions for MoH institutions as well as other ministries and departments. There are databases on causes of death, and epidemiological surveillance for 38 forms of infectious and parasitic disease as well as immunization. Surveillance of maternal and reproductive health is conducted in the field of paediatrics (in the Registry of Newborns, etc.) and NCDs (for endemic goitre and iron-deficiency anaemia).

Weaknesses: Despite the existence of a legislative framework in all fields of epidemiological surveillance, its enforcement and practical implementation require the development of additional regulations for: the functions of responsible organizations; data collection flows, especially in the delivery of services beyond the scope of public health activities; risk factors and determinants; organization of meals for children and the elderly; environmental health; occupational health; road safety; injuries and violence; antimicrobial resistance; and migrant health.

Areas for improvement: G; F; RG; SD

1.C. Surveillance of health system performance

Strengths: The country has strategic and conceptual documents regulating surveillance and monitoring of health system performance, including the Den Sooluk programme's national drug policy for 2014–2020.

Weaknesses: Insufficient funding and high turnover of skilled personnel are both barriers to the efficient operation of the health system, and to the accessibility of quality health services and medicines.

Areas for improvement: G; F; RG; SD

1.D. Data integration, analysis and reporting

Strengths: Kyrgyzstan's health sector collects indicators on a regular basis for the preparation of country reports on regional and global initiatives for health and development, including Health 2020, the IHR, the MDGs and the Post-2015 Development Agenda, United Nations General Assembly special sessions, the epidemiological surveillance of NCDs, universal health coverage, etc.

Weaknesses: Underfunding, a constant outflow of trained personnel and a lack of unified electronic databases all form barriers to advancement in this area.

Areas for improvement: F; RG; SD

EPHO 2. Monitoring and response to health hazards and emergencies

OVERVIEW

All activities carried out under EPHO 2 are based on Law No. 239 “On civil protection” (20 July 2009) and Regulation No. 349 “On the formation of civil protection” (1 July 2011).

The departments (units) of the Ministry of Emergency Situations determine the list of civil protection units, their organizational and staff structure, and their equipment in regions, districts and cities. This is done with the involvement of relevant ministries, departments and organizations where the civil protection units are formed, and with the approval of the head of each civil protection unit.

Kyrgyzstan has a programme for the comprehensive monitoring and forecasting of natural disasters for 2015–2017 that includes the use of geographic information systems (GIS) and remote sensing. This was approved by Government Decree No. 255 (23 April 2015). It includes activities to strengthen the institutional framework of monitoring systems, mechanisms for data collection and processing, and capacities for monitoring natural hazards and assessing risk.

Government Resolution No. 1 (3 January 2011) dictates a single unified information management system for emergencies and crises. Its main task is to ensure close cooperation among national enforcement authorities, local state administrations, local governments and organizations involved in emergency response. This unified information management system provides the organizational and technical unit with facilities, a means of communication and alert/notification, broadcast networks, public switched telephone network channels, and departmental networks.

However, a streamlined management/governance system is needed to further develop public health system’s capacity for emergency response. As the Ministry of Emergency Situations manages finances in this area, resources for disaster preparedness in the health care system are limited. The institutional framework, health sector response plans, coordination structures, notification and alert systems, and essential response services currently exist under separate services, and mechanisms for information exchange and interaction are undeveloped. Preventive activities in the public health system are also undeveloped.

Emergency response is carried out by public health institutions in accordance with MoH Order No. 81 “On improving the preparedness of governance bodies and health care organizations of the medical civil protection services of the Kyrgyz Republic to the threat and onset of emergencies and disasters” (22 February 2013), and the schedule of sanitary-epidemiological activities of the Medical Service Task Force under the state civil protection system (12 March 2015).

In 2016, the country began to establish specialized antiepidemic teams. Currently, the teams are equipped with two vehicles and mobile laboratories, and training courses are conducted for specialists.

In terms of on-site response, the country has a laboratory monitoring network that can respond promptly to emergencies. Other services and structures (disinfection teams, groups of sanitary officers/doctors, consultants, specialist epidemiologists, infectious disease specialists, psychologists, etc.) are engaged on case-by-case basis by local health facilities, as well as at secondary and tertiary levels.

Kyrgyzstan is implementing the IHR and has received a positive assessment in this area. The DDPSSSES is responsible for IHR coordination. The national IHR implementation plan includes rationalization, readiness, training, and involvement of other sectors, ministries and agencies.

The country has action plans in case of public health emergencies, including for laboratory services. However, the establishment of intersectoral response teams, operational issues regarding points of entry, and communication with other sectors remain incomplete.

The country has a surveillance system for preventing the introduction and dissemination of severe infections and conducts operations according to WHO recommendations. This system is adapted according to new diseases and infections, such as Ebola virus, avian and swine influenzas, and Zika virus.

Improvements to the functioning of sanitary-quarantine points are needed, including a definition of responsibilities and a delineation of authority (currently, some points are overseen by the DDPSSSES and others by the RCQEDI). There is also a need for bilateral agreements with other countries to facilitate the exchange of experience, develop joint plans and train specialists.

SUMMARY OF RESULTS

Overall, EPHO 2 received a score of 35%, indicating that it is one of the two least-developed EPHOs (see Fig. 5 and Table 3). This is largely due to Kyrgyzstan's lack of long-term mechanisms for responding to emergencies.

The most problematic areas are ability to predict public health emergencies (20%) and capacity for recovery and restoration of essential health services (20%). All other subfunctions under identification and monitoring of health hazards (2.A) and preparedness and response to public health emergencies (2.B.) scored 40%, mainly due to lack of funding. Subfunctions under IHR implementation (2.C) all scored 30%, also due to lack of funding as well as a delay in the coordination and approval of IHR implementation by the Government.

Fig. 5. Assessment results for EPHO 2 (%)

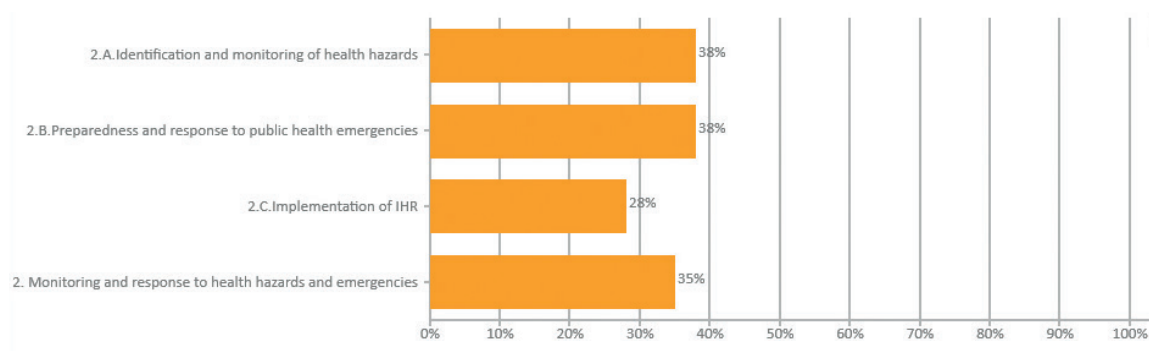


Table 3. Results of EPHO 2 assessment by subfunction (%)

Number	Subfunction	Score (%)
2A.	Identification and monitoring of health hazards	
2.A.1.	Risk and vulnerability assessments in accordance with an all-hazard/whole-health approach	40%
2.A.2.	Capacity to set up an early warning alert and response network (EWARN) to address problems related to displaced populations	50%
2.A.3.	Laboratory support for investigation of health threats	40%
2.A.4.	Ability to predict public health emergencies	20%
2.B	Preparedness and response to public health emergencies	
2.B.1.	Institutional framework for emergency preparedness	40%
2.B.2.	Health sector emergency plan	40%
2.B.3.	Ministry of health emergency preparedness and response unit	40%
2.B.4.	Coordination structure in the event of a public health emergency	40%
2.B.5.	Public information, alert and communication system	40%
2.B.6.	Protection, maintenance and restoration of key systems and services in the event of a public health emergency	40%
2.B.7.	Critical response services	40%
2.B.8.	Mitigation actions to reduce long-term vulnerability to public health emergencies	40%

Number	Subfunction	Score (%)
2.B.9.	Capacity for recovery and restoration of essential health services	20%
2.C.	Implementation of IHR	
2.C.1.	Fostering global partnerships for IHR implementation	30%
2.C.2.	Strengthening of national public health capacities in for surveillance and response	30%
2.C.3.	Public health security in travel and transport	30%
2.C.4.	Management of specific risks	30%
2.C.5.	Preservation of rights, procedures and obligations	30%
2.C.6.	Performance of studies to track progress in the implementation of IHR	30%

Key recommendations

- **Priority recommendation (low effort–high impact):** Develop capacity to assess emergency risk using new technologies such as GIS to map sources of acute and dangerous infections and to rank them (2.A.1).
- Update disaster preparedness plans on a regular basis (including operational plans, alert/ notification plans, supplies and consumables, etc.) (2.B.2).
- Develop the guidelines on response to outbreaks of infectious diseases and approve it by an order of the MoH (2.B.4).
- Support the work of sanitary–quarantine points, and develop their structure, responsibilities, and reporting and communication mechanisms (2.B.5).

STRENGTHS, WEAKNESSES AND AREAS FOR IMPROVEMENT

2.A. Identification and monitoring of health hazards

Strengths: The country has organizations and structural units with qualified personnel capable of performing risk assessment and predicting public health emergencies.

Weaknesses: There is a shortage of both resources (supplies, materials and technologies) and skills (regular theoretical and practical trainings for specialists). There is no specific mechanism for cooperation and sharing information with neighbouring states.

Areas for improvement: G; F; RG; SD

2.B. Preparedness and response to public health emergencies

Strengths: The country has an institutional framework for emergency preparedness, including a regulatory framework. Plans are also in place, including the calendar of sanitary–epidemiological

activities of the Medical Service Task Force under the state civil protection system, a comprehensive plan, and operational plans. MoH departments are responsible for emergency preparedness and response. Joint simulation exercises by the MoH and the Ministry of Emergency Situations are conducted on a regular basis.

Weaknesses: At the regional level, there is a lack of adequate materials and technologies, resources for responding to emergencies, standard all-hazards operating procedures, and resources for training. This hinders the rapid and efficient recovery of key systems and services during emergencies and increases the long-term vulnerability of health care facilities located in areas where emergencies occur.

Areas for improvement: G; F; RG; SD

2.C. Implementation of IHR

Strengths: Kyrgyzstan is currently implementing the IHR, pending approval by Government resolution. It has defined the coordinating body, developed the IHR implementation plan (including the preparedness plan), conducted training sessions, and liaised with relevant ministries and departments. It also organized and equipped sanitary-quarantine points at borders on major transport nodes.

Weaknesses: Weaknesses include inadequate materials and technologies for emergency response, underskilled specialists at sanitary-quarantine points, lack of funds for regular monitoring and evaluation, and lack of research to track progress in IHR implementation.

Areas for improvement: G; F; RG; SD

EPHO 3. Health protection, including environmental, occupational, food safety and others

OVERVIEW

Kyrgyzstan has health protection legislation, including for environmental, occupational and food safety. The laws “On environmental safety” and “On ecological expertise” regulate levels of key pollutants in air, water and soil, and mandate the assessment of their impact on the environment. Levels of harmful substances in the air of workplaces are regulated by the hygienic standard “maximum permissible concentrations of harmful substances in the air of working areas”.

The presence of harmful substances in indoor areas, including residential and public buildings, is regulated by the hygienic standard “Maximum permissible concentrations of pollutants in the ambient air of populated areas”. Since 2011, in accordance with the law “On regulatory legal acts”, the above hygienic standards are advisory or recommendation-based. Hygienic standards were included in the list of regulatory documents to ensure compliance with the technical regulation “On the safety of buildings and structures”.

In accordance with the law “On the fundamentals of technical regulation in the Kyrgyz Republic”, Kyrgyzstan developed technical regulations on the safety of construction materials, products and constructions, and on the safety of buildings and structures. The standards, including requirements for microclimate and ventilation, are set by the hygienic standards and sanitary regulations “Maximum allowable concentrations (MACs) of harmful substances in occupational air” (GN 2.2.5.1313-03), “Tentative safe exposure limits (TSELs) of harmful substances in occupational air” (GN 2.2.5.1314-03), and “Hygienic requirements for organization of the production of building materials and structures” (SanPiN 2.2.3.005-03).

Kyrgyzstan ratified the Montreal Protocol, the Stockholm Convention and the Rotterdam Convention.

In accordance with the law “On public health”, drinking water must be safe and comply with the country’s technical regulations (Article 10). The values stated in the legislation for chemical, biological and radiological contaminants are established by the technical regulation “On the safety of drinking-water”, and approved by a law. Quarterly reviews of drinking-water quality are carried out by the DDPSSSES.

Collection, storage, use, treatment, transportation and disposal of industrial and consumer wastes as well as state surveillance and control in the area of waste management are regulated by Law No. 89 “On production and consumption of wastes” (13 November 2001). In accordance with this, the control of wastewater should be carried out by the SAEPF.

The scope of work of the SAEPF includes the issuance of permits for discharging polluting substances and wastes into water systems, collector–drainage systems, farmlands (as irrigation), filtration and evaporation systems, and lands. Reuse of treated wastewater in agriculture is carried out in accordance with Article 49 of the Water Code, and is regulated and supervised by the state body authorized to oversee environmental protection.

In accordance with Resolution No. 87 “On organizational measures related to the reform of the executive authorities in the Kyrgyz Republic” (10 February 2012), control and supervision of environmental protection functions are assigned to the State Inspectorate for Environmental and Technical Safety under the Government. The Inspectorate monitors the situation in accordance with staffing schemes approved by the Government. In recent years, the Government has taken steps to improve the Inspectorate’s capacity, but has not yet ensured adequate physical and administrative resources, including for the establishment of a laboratory with necessary equipment and information technologies.

This being so, the monitoring of pollution indicators is carried out by laboratories of other departments, including the SAEPF, the DDPSSSES, the Department of Chemical Treatment and Plant Protection under the Ministry of Agriculture and Melioration, and the Hydrometeorological Agency under the Ministry of Emergency Situations.

Environmental protection and climate change mitigation/adaptation are on the agenda of executive and legislative agencies. Parliament developed and adopted amendments to legislation on actions for climate change adaptation and low–carbon development, including the Forestry Code, the Water Code, the laws “On environmental protection”, “On air protection”, “On transport”, “On the protection of health of the citizens of the Kyrgyz Republic” and “On public health”.

Article 10 of Law No. 51 “On air protection” (12 June 1999) specifies that the SAEPF will establish standards of maximum permissible emissions for mobile sources of air pollution.

In 2013, the Government endorsed priority areas for climate change adaptation in the country until 2017. These were developed in consultation with the SAEPF. The sectors most vulnerable to climate change were identified as: water and forest resources, hydropower, agriculture, public health, and biodiversity. Consequently, the MoH, the Ministry of Agriculture and Melioration, the Ministry of Emergency Situations, and the SAEPF developed sectoral adaptation programmes that are being implemented in the areas under their supervision.

Currently, the SAEPF is considering the concept of low–carbon development. Having signed the Copenhagen Accord, Kyrgyzstan has committed to reducing greenhouse gas emissions by 20% by 2020 (relative to the so–called business as usual scenario) with appropriate international support.

In 2015, after the Climate Investment Fund supported its application, Kyrgyzstan was selected for the pilot Climate Resilience Improvement Project along with 10 other countries. Kyrgyzstan’s main policy documents related to energy efficiency and renewable energy include the laws “On energy”, “On the electric power industry”, “On energy–saving”, and “On renewable energy sources”; the national energy programme for 2008–2010; and its development strategy for the fuel and energy sector until 2025.

The country has regulatory legislation on occupational health, including the Constitution of the Kyrgyz Republic (section on working conditions and labour protection), the Labour Code, the law “On occupational safety”, Government Resolution No. 225 “On approval of regulatory legal acts in the area of public health” (16 May 2011) and International Labour Organization conventions. A national review of labour protection in Kyrgyzstan is currently underway, and the country will develop a national labour protection programme based on its findings.

The country has a mechanism for interagency coordination in the area of control and supervisory activities. This includes joint regulations for implementing relevant functions for the MoH and the State Inspectorate for Environmental and Technical Safety. Interactions between employers and the MoH in the area of employee medical examinations are stipulated in Government Resolution No. 225 “On approval of regulatory-legal acts in the area of public health” (16 May 2011).

Issues related to occupational health are incorporated into Kyrgyzstan’s health care development strategy for 2014–2020 (Section 5.5.3. on health protection measures in the field of environmental health, occupational health, food safety, etc.). Regulation No. 225 also specifies issues related to occupational health. Issues that are specific to certain groups will be included in the forthcoming national labour protection programme.

In the area of food safety, the DDPSSSES and the State Inspectorate for Veterinary and Phytosanitary Safety (SIVPS) perform control and supervisory functions. Kyrgyzstan’s laboratories for testing food and agricultural products are accredited for ISO/IEC 17021 compliance by the Kyrgyz Centre of Accreditation under the Ministry of Economy, a member of the International Laboratory Accreditation Cooperation. However, due to underfunding, testing laboratories are insufficiently supplied with technical equipment. Laboratories do not have the capacity to perform tests related to, for example, melamine, dioxins, antibiotics, *Listeria* spp., benzopyrene, nitrosamines, or radionuclides. The supply of testing laboratories with modern equipment is currently being discussed.

The national system of food safety has a comprehensive legislative framework and a system of official controls. This includes the law “On the fundamentals of technical regulation in the Kyrgyz Republic” (22 May 2004). It establishes the legislative framework for the development, adoption, application and enforcement of mandatory requirements for products; the processes of design, production, construction, installation, adjustment, storage, sale, use and disposal of products; and compliance assessment.

To ensure food safety for the population, technical regulations envisage the introduction of management systems for food safety in production facilities. Since the technical regulation “On food products hygiene” entered into force in the country, the introduction of food safety management systems in production facilities is prescribed in compliance with the principles of hazard analysis and critical control points.

Food safety monitoring is carried out by controlling agencies in accordance with the regulations and the rules of cooperation between the DDPSSSES and SIVPS. The DDPSSSES, under the MoH, conducts analyses of food safety indicators on a regular basis. An information system to electronically monitor food safety compliance is being implemented at the national level.

To improve the efficiency of business inspections, and in accordance with Law No. 72 “On the procedure for conducting inspections of business entities” (25 May 2007), amendments

and addenda were entered into Government Decree No. 108 “On approval of the criteria for risk assessment in business activity” (18 February 2012). These took the form of Government Resolution No. 167 (March 2016), which sets out the frequency of scheduled routine inspections and a requirement for assessing degree of risk.

Safety procedures in Kyrgyz health care organizations are regulated by Government Resolution No. 32 “On approval of the instruction on infection control in health care organizations of the Kyrgyz Republic” (12 January 2012). The Resolution sets the sanitary and epidemiological requirements for the safety of medical procedures, as well as the disinfection and sterilization of medical devices and medical equipment materials and supplies. The requirements for medical devices are established by the technical regulation “On the safety of medical devices”.

Regulatory and legal acts and standards for assessing the quality of services and programmes are not available in Kyrgyzstan. However, accreditation standards are approved for hospitals, family medicine centres, general practice centres, family group practitioners with independent legal status, dental clinics, and laboratories. These standards were approved by MoH Order No. 180 (7 April 2009).

As part of the cooperation programme for 2012–2016 between UNICEF and the Government of Kyrgyzstan and with the support of UNICEF, the United Nations Population Fund and WHO, the MoH conducted a quality assessment of inpatient and outpatient services provided for antenatal and postnatal care using a WHO methodology.

With the support of the World Bank, the MoH also began implementing the Results-based Financing Project in 2014. The Project is aimed at improving quality of care and implementation of the MDGs, including reducing child mortality and improving maternal health.

In accordance with the Government resolution “On approval of the instruction on infection control in health care organizations of the Kyrgyz Republic” and MoH Order No. 641 (26 November 2012), committees on health care quality and safety should be established in each health care facility. According to committee regulation, their work involves ensuring the safety of the health services provided, including proper infection control measures.

The legal basis for road safety in Kyrgyzstan is established in Law No. 527 “On traffic in the Kyrgyz Republic” (20 April 1998). Its objectives include protecting the lives, health and property of citizens; protecting their rights and legitimate interests; and protecting the interests of society and state by preventing traffic accidents and reducing the severity of their consequences.

Traffic and road safety are also governed by articles 12–17 of the law “On transport” (8 July 1998), articles 37–39 of the law “On automobile roads” (2 June 1998), the Rules of Road Traffic (4 August 1999) and Technical Regulation No. 178 “On the safety of ground vehicles” (29 May 2009).

Currently, poor road safety is a serious problem in Kyrgyzstan: high rates of traffic accident-associated mortality and injury on the roads are registered throughout the country. Kyrgyzstan was ranked 123 out of 144 countries in 2014 in terms of road quality. Some of its most pressing problems are lack of lighting, lack of pedestrian fencing and sidewalks, lack of road markings (roads marked as 2-way are in fact 3-way roads), and poor road conditions. The length of roads in the country totals 66051.4 km. In recent years, roads were upgraded mechanically and with

the use of computer systems and other equipment, but their overall quality still falls short of international standards, including those of the Eurasian Economic Union (EAEU).

Kyrgyzstan's strategy for the development of road transport also highlights the need for a modern system for state technical inspections of motor vehicles. State technical inspections are regulated by the law "On general technical regulation of the Kyrgyz Republic on the security of ground vehicles". They are carried out by diagnostic centres equipped with modern tools for determining the compliance of motor vehicles and their parts with manufacturers' requirements.

Kyrgyzstan's main challenges in the area of road safety include: a lack of centres to carry out a comprehensive study of all traffic accident cases, the lack of a single database, an acute shortage of technical devices for traffic control and regulation, and a lack of video and camera equipment for traffic accident analysis. In this regard, Kyrgyzstan lags behind all other countries of Europe and central Asia.

Product safety in Kyrgyzstan is mandated by technical regulations; at present, more than 40 have been enacted in the area of product safety, including 20 in the area of food safety. On 12 August 2015, Kyrgyzstan entered the EAEU, implying its use of uniform requirements set by technical regulations to ensure the safety of products on the EAEU market. Within the EAEU framework, 35 technical regulations establish product safety requirements. These have a direct effect in the territories of EAEU Member States; with their entry into force, national technical regulations expire.

The protocol "On transitional provisions and conditions for application of the Treaty of the Eurasian Economic Union by the Kyrgyz Republic" (29 May 2014) stipulated gradual entry into force of the technical regulations of the Eurasian Customs Union (EACU) in Kyrgyzstan. Since 12 February 2016, the following technical regulations entered into a legal force in the country: "On the safety of perfumery and cosmetic products" (TR TC 009/2011), "On the safety of personal protective equipment" (TR TC 019/2011) and "On tobacco products" (TR TC 035/2016). Other technical regulations will come into legal force on 12 August 2017.

SUMMARY OF RESULTS

Overall, EPHO 3 received a score of 53%, indicating that it is moderately developed (see Fig. 6 and Table 4).

Scores were affected by insufficient technical capacities for risk assessment with regards to environmental health protection (40%), occupational health protection (40%), food safety (40%), road safety (40%) and consumer product safety (40%).

Cross-sectoral integration of occupational health in other national policies is insufficient (40%), as is the national contribution to minimum standards regulating cross-border care (30%).

Fig. 6. Assessment results for EPHO 3 (%)

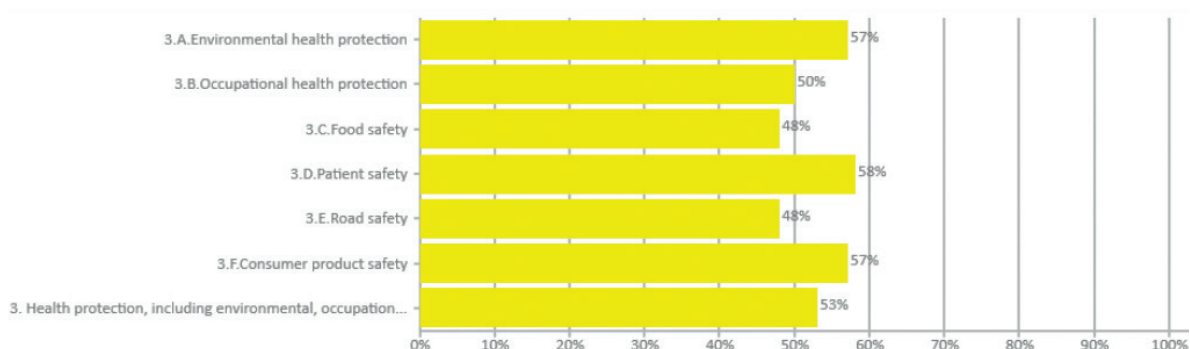


Table 4. Results of EPHO 3 assessment by subfunction (%)

Number	Subfunction	Score (%)
3.A.	Environmental health protection	
3.A.1.	Legislative framework for the environmental health protection in the area of air, water and soil quality	60%
3.A.2.	Technical capacity for risk assessment in the area of environmental health	40%
3.A.3.	National legislation and international cooperation in the area of climate change mitigation and energy security	60%
3.A.4.	Environmental health protection in the area of housing	80%
3.A.5.	Capacity to communicate and collaborate with key stakeholders in the area of environmental protection	60%
3.A.6.	Effectiveness of sanctions and measures implemented to prevent environmental harm	50%
3.A.7.	Institutional capacity to respond to hazards	60%
3.B	Occupational health protection	
3.B.1.	Occupational health and safety protections	70%
3.B.2.	Health promotion and protection in the workplace	60%
3.B.3.	Occupational health services for workers	40%
3.B.4.	Cross-sectoral integration of occupational health in other national policies	40%
3.B.5.	Occupational hazards reporting system and workplace inspections	60%

Number	Subfunction	Score (%)
3.B.6.	Technical capacity for risk assessment in the area of occupational health and safety	40%
3.B.7.	Management and mitigation of risks related to occupational health	40%
3.C.	Food safety	
3.C.1.	Food safety regulatory framework	70%
3.C.2.	Technical capacity for risk assessment in the area of food safety	40%
3.C.3.	Monitoring and enforcement of food safety protections	40%
3.C.4.	Management and mitigation of risks with regard to food safety	40%
3.D.	Patient safety	
3.D.1.	Laws and institutional framework for protecting patient/provider safety	70%
3.D.2.	Consumer protection with regard to health services	60%
3.D.3.	Technical capacity for risk assessment in the area of patient and provider safety	70%
3.D.4.	Monitoring and supervision of patient safety	60%
3.D.5.	Management and mitigation of risks with regard to patient and provider safety	60%
3.D.6.	National contribution to minimum standards regulating cross-border care	30%
3.E.	Road safety	
3.E.1.	Road safety framework	50%
3.E.2.	Technical capacity for risk assessment in the area of road safety	40%
3.E.3.	Supervision and enforcement of road safety legislation and controls	60%
3.E.4.	Management and mitigation of risks with regard to road safety	40%
3.F.	Consumer product safety	
3.F.1.	Safety regulations with regard to consumer products	70%
3.F.2.	Technical capacity for risk assessment in the area of consumer safety	40%
3.F.3.	Enforcement and risk management with regard to consumer safety norms	60%

Key recommendations

- Develop the national programme on health care adaptation to climate change for 2016–2020 and approve it by order of the MoH (3.A.3).
- Incorporate new technologies into the process of inspections (3.A.2).
- **Priority recommendation:** Develop a national programme on labour protection and legislation to ensure intersectoral collaboration for the protection of workers' health (3.B.4).
- Revise regulatory legal acts on speed limits in residential areas (reduce 60 km/h to 50 km/h; reduce 40 km/h to 30 km/hr), and introduce the requirement of child car seats (3.E.2).

STRENGTHS, WEAKNESS AND AREAS FOR IMPROVEMENT

3.A. Environmental health protection

Strengths: The country has a legislative framework for environmental protection, and all ministries and agencies cooperate within the Intersectoral Commission on the Inventory of Regulatory Legal Acts under the Ministry of Justice. Current regulatory legislation is in line with international law, including clauses related to climate change mitigation and energy security.

Weaknesses: Inadequate funding, a low level of cooperation between state and non-state actors, a lack of technical capacity for environmental risk assessment, and key regulations that are written in the style of recommendations all negatively impact the efficiency and effectiveness of communication and implementation.

Areas for improvement: G; F; RG; SD

3.B. Occupational health protection

Strengths: Basic regulatory legislation in the area of occupational health and safety is in place.

Weaknesses: There is currently no cross-sectoral integration of occupational health with other national strategies. Additional legal acts in this area are also needed, as previously developed legislation cannot be used in light of protecting businesses from unnecessary audits. This situation is further exacerbated by a low capacity for overseeing the development and execution of regulatory legal acts, law enforcement, etc. The lack of a unified national information system on occupational diseases, inadequate physical resources and the lack of intersectoral coordination are also obstacles to risk assessment and risk management.

Areas for improvement: G; F; RG; SD

3.C. Food safety

Strengths: The country has a legislative framework in the area of food safety that is currently being improved based on best international practices. It has educational institutions for training specialists as regulatory and supervision authorities.

Weaknesses: There is a lack of technical capacity for risk assessment, risk management, and monitoring and enforcement of safety measures due to poor development of the laboratory network and an inadequate material and technical base.

Areas for improvement: G; F; RG; SD

3.D. Patient safety

Strengths: A regulatory and legal framework for patient safety is in place. It defines the institutional framework protecting the safety of patients and providers, and enables the monitoring and control of patient safety during surgical interventions and in cases of bloodborne infection.

Weaknesses: An inadequate material and technical base as well as a lack of funding prevent full implementation of regulatory and legal acts, including for monitoring and control of patient safety and risk management. Regulatory and legal acts in the area of cross-border health care are needed.

Areas for improvement: G; F; RG; SD

3.E. Traffic safety

Strengths: Kyrgyzstan has developed traffic safety legislation based on good international practices.

Weaknesses: Ongoing challenges include weak infrastructure, an inadequate material base to ensure traffic safety and inefficiency of monitoring vehicle safety.

Areas for improvement: G; F; RG; SD

3.F. Consumer products safety

Strengths: Kyrgyzstan has developed consumer product safety legislation based on good international practices.

Weaknesses: Ongoing challenges include low capacity and low motivation of public services staff in this area, and an inadequate material and technical base to ensure safety control, risk assessment and risk mitigation.

Areas for improvement: G; F; RG; SD

EPHO 4. Health promotion, including action to address social determinants and health inequity

OVERVIEW

EPHO 4 extends beyond the health sector, and therefore requires well coordinated cross-sectoral cooperation. It also necessitates the integration of health issues into the policy documents of other sectors that have impact on health outcomes and service accessibility. These include social protection, education, law enforcement, economic regulation and local governance.

To ensure effective measures and to strengthen intersectoral and whole-of-government approaches to health, the Government established the CCPH by Decree No. 352 (26 June 2016) under the chairpersonship of the Vice-Prime Minister on Social Issues. The CCPH controls the development and implementation of practical measures in the area of public health, and coordinates the activities of other ministries and governmental agencies, local administrations, and partners in disease prevention and health promotion and protection.

The MoH is now implementing the strategy for public health protection and promotion until 2020 (the national Health 2020 strategy), which includes a strategic vision for health sector improvement based on an intersectoral approach. The strategy also coordinates the activities of different governmental structures involved in the implementation of public health programmes and regulations.

At the end of 2012, the MoH developed and submitted to the Government draft medical regulations on the prevention and reduction of tobacco consumption with the RCHP identified as the responsible agency. Kyrgyzstan also has a draft programme on the prevention and reduction of harmful use of alcohol for 2016–2022 with the Republican Centre for Narcology as the responsible agency; and a draft programme on mental health for 2017–2030 with the Republican Centre for Mental Health as the responsible agency.

The Republican Centre for Narcology, international organizations and nongovernmental organizations (NGOs) co-coordinate the prevention psychotropic drug use. The Republican Scientific-Research Centre for Trauma and Orthopaedics in Bishkek leads policies and programmes on trauma prevention.

In spite of these efforts, the roles and responsibilities of many sectors have not been defined, and the implementation of plans is currently on a short-term basis. Bodies of state administration and local self-government are key partners in the implementation of public health policies, but many have limited resources; this prevents them from fully carrying out their functions and duties.

One of the priorities of the Manas Taalimi and Den Sooluk programmes is the involvement of communities in the development and implementation of health protection and promotion efforts. This approach has proven efficient: within the framework of the Community Action for Health

(CAH) programme, village health committees (VHCs) have been established across the country. These VHCs are engaged in improving the health of communities in partnership with local authorities, community organizations, schools and NGOs.

VHCs are formed from representatives of the local communities, and involve the population in voluntary activities focused on local health improvement. VHCs cooperate with health systems as independent civil society organizations comprising 58 rayon (district) health committees. As of 1 December 2016, 1656 VHCs were operating in 1805 villages in Kyrgyzstan, covering 81% of communities.

VHCs offer a wide range of activities selected according to analyses of the population's health priorities. Key areas of work include prevention of iodine deficiency and cardiovascular diseases; improvement of nutrition; and improvement of hygiene and sanitation. During the "Find out your blood pressure!" campaign, for example, VHC members measure blood pressure and inform the population about cardiovascular risk factors and the importance of blood pressure control. In 2015 alone, VHC members measured the blood pressure of 326 795 people.

With the support of primary health care workers, VHCs are also working to raise awareness of maternal and child health, hypertension, anaemia among children and pregnant women, tuberculosis, smoking, HIV infection and drug addiction, sanitation and hygiene, immunization, reproductive health, and brucellosis and echinococcosis. Within their institutional capacity, VHCs contribute to improving health determinants through initiatives to repair feldsher-midwifery points, construct banyas, grow vegetables, clean canals, plant trees, etc.

Kyrgyzstan is a country with unstable economic growth and social policies. In terms of health determinants, low-income families, seniors and people with disabilities represent the most vulnerable groups. In order to improve the political, economic and social development of the country, the Government adopted the national strategy for sustainable development for 2013–2017. Public authorities, local government and civil society are involved in its implementation.

The most significant factors affecting population health are food safety and nutrition. In 2015, the Government passed a resolution approving the food security and nutrition programme for 2015–2017, which is aimed at ensuring food security, improving nutrition and strengthening population health. The Ministry of Agriculture and Melioration, the Ministry of Finance and other agencies contributed to the programme's development.

To improve the nutritional status of the population, Kyrgyzstan passed the law "On the prevention of iodine deficiency disorders" as well as the technical regulations "On the safety of iodized salt", "On the fortification of baking flour", "On the safety of fortified flour" and "On the protection of breastfeeding and the regulation of marketing of products and supplies for the artificial feeding of children".

Another important achievement in this area is Kyrgyzstan's membership in the global Scaling Up Nutrition movement since 2011. Within the framework of membership, the country established an intersectoral platform to bring together government bodies, development partners, and representatives of the business sector and civil society.

The MoH carries out activities to achieve universal iodization of edible salt; to establish a system of internal and external monitoring of the quality of flour fortification; to distribute vitamin and mineral complexes to the public to enrich food for children aged 6–24 months; to provide primary school-aged children with free school meals; and to improve public awareness about nutrition issues through the health care system and the media.

Nevertheless, there is a high prevalence of iron-deficiency anaemia among children and adults in the country, as well as stunting in children under five years of age due to inadequate intake of essential nutrients. Nutrition for healthy ageing has not been given due attention.

Inflation, cost of food, and state subsidies for vulnerable social groups are all critical issues in Kyrgyzstan. Vulnerable groups often cannot independently generate enough revenue to access an adequate quantity of food, and are dependent on social benefits and pensions as well as, to a lesser extent, income from work. To address this, the country approved and enacted the Government resolutions “On raising social protection of low-income families and enhancing the targeting of monthly benefits to low-income families with children” and “On the procedure for detection/identification of children and families in difficult life situations”.

Kyrgyzstan confirmed its commitment to gender issues with the adoption of the laws “On state guarantees of equal rights and equal opportunities for men and women”, “On social and legal protection from domestic violence” and “On the reproductive rights of citizens”, and with the development of the national strategy on gender equality until 2020. Equality between men and women is stipulated by the Constitution of the Kyrgyz Republic and by civil and family codes. Children’s rights and social and legal protection from violence are outlined in the Code on Children, the Criminal Code and the Administrative Code of the Kyrgyz Republic.

The protection of reproductive health is a priority within the Den Sooluk programme. Health and counselling services for reproductive health are provided at primary and secondary health care levels, but services for adolescents and men are not provided to a sufficient degree. To alleviate social tensions and to reduce financial burden on the vulnerable segment of the population, various programmes have been implemented: pregnant women are given a mandatory health insurance policy to purchase medicines (once they are registered for medical follow up). Access to knowledge on reproductive health is provided through the civil society and education sectors.

Domestic violence against women and children is still one of the most pressing problems in the country. To address this, Government Resolution No. 125-p (25 March 2015) approved the action plan for the prevention of abuse and violence against children for 2015–2017.

Emergency task forces for the prevention of violence against children were established in all regions of the country under local administrations. According to MoH Decree No. 177 “On the realization of the state programme on the development of justice for children in the Kyrgyz Republic for 2014–2018” (10 April 2015) and the action plan mentioned above, all health facilities must register cases of violence and inform relevant police and special headquarters.

The Ministry of Social Development also established a telephone hotline service to help prevent domestic violence. However, domestic violence is often a hidden problem and acts of violence

are rarely registered officially. Most women who experience abuse prefer to seek help from crisis centres than law enforcement agencies, as crisis centres provide women with the support of psychologists and lawyers as well as assistance in seeking care from health facilities. Some crisis centres also have communal shelters. The country's Association of Crisis Centres includes 12 centres and NGOs.

In general, the Kyrgyz population is not committed to healthy lifestyles. The level of public awareness of risk factors for morbidity, disability and mortality from NCDs – such as poor diet, sedentary lifestyle, smoking and alcohol abuse – is inadequate.

The State Agency for Youth Affairs, Physical Culture and Sports oversees policies related to active lifestyle. To develop and popularize physical culture and sports, it organizes and carries out international sports competitions and games for public employees. It developed recommendations for conducting 10 types of national games, physical exercises and gymnastics, and submitted these to the Ministry of Education and Sciences for incorporation into the education system. Physical activity also refers to other activities, such as walking or jogging. Kyrgyzstan's cities include parks where people can exercise. Bishkek, for example, features three sets of outdoor gym equipment in urban parks and two streets with marked bicycle lanes. In spite of these positive measures, a culture of health-enhancing physical activity is not fully developed; levels of physical activity and sports in the country are measured at 6–7%, and the condition of sports facilities and equipment is insufficient. As a result, children and young people in Kyrgyzstan are in poor physical shape.

Tobacco use is a behavioural risk factor that can be modified, and the country has targeted policies focused on tobacco control. Kyrgyzstan ratified the WHO Framework Convention on Tobacco Control (WHO FCTC) and adopted and amended the law "On the protection of Kyrgyz citizens' health from the harmful effects of tobacco". In 2011–2014, excise taxes on tobacco products were quadrupled, and health warnings including images are now displayed on cigarette packages. In 2016, a free telephone hotline funded by the MoH was established to provide assistance for smoking cessation.

Every year World No Tobacco Day campaigns take place throughout the country. They include activities to raise public awareness about tobacco laws, roundtables to discuss tobacco-related issues, and educational events for schoolchildren, students and villagers.

The fifth National Conference on Tobacco Control was devoted to the 10-year anniversary of the implementation of the WHO FCTC in Kyrgyzstan. The Conference focused on issues related to strengthening legislation and its implementation to regulate tobacco consumption; next steps for a tax increase; preventing smoking in public places; implementing clinical protocols in health facilities; ongoing activities of the telephone hotline; and awareness-raising in the education sector. Representatives of local authorities, law enforcement agencies, public organizations and the media actively participated and supported the activities.

Like smoking, alcohol abuse is a modifiable risk factor. Legislative and regulatory measures to prevent drink-driving are regulated by the Government resolutions "On approval of the regulations of medical examination to identify the condition of acute intoxication or the fact of use of psychoactive substances" and "On approval of the regulations for referring people to medical examination to identify the condition of alcohol intoxication, or the fact of use of narcotics,

psychotropic and other intoxicating substances”. The country systematically addresses alcohol abuse and the consequences of alcohol consumption, including drink–driving, through the joint work of professionals from the health care and education sectors, the police, and juvenile committees.

In order to limit minors’ access to alcohol and the promotion of alcoholic beverages, the law “On state regulation of production and circulation of ethyl alcohol and alcoholic beverages” was amended. However, current legislation related to restrictions on the sale of alcohol has not been enacted, and the availability of alcoholic beverages is high. To date, there is no stipulation on the responsibility of executive bodies for enforcing measures to counter the widespread consumption of alcohol.

Addiction and mental health services are mainly provided in hospitals on an inpatient basis. The accessibility of these services at the district level is almost zero, and psychological and counselling services for children and adolescents are underdeveloped. Mental health services are also isolated from general health care. The diagnosis of mental disorders only occurs when people seek it out themselves or when it is required; people usually seek care from special health facilities only in cases of severe diseases or serious disorders.

Methadone substitution therapy programmes and needle exchange sites are integrated into HIV prevention programmes. There are now 29 sites for methadone substitution therapy and 11 needle exchange sites in Kyrgyzstan.

SUMMARY OF RESULTS

Overall, EPHO 4 received a score of 58%, indicating that it is moderately developed (see Fig. 7 and Table 5).

Well developed areas include ministry of health engagement and involvement of local communities and civil society in the area of health promotion (70%); tobacco policy in line with WHO FCTC requirements (80%); infant and early childhood nutrition (80%); and childhood and adolescent nutrition (80%).

The following subfunctions, all of which received a score of 50%, require additional attention and further development: alcohol control policy in line with the WHO Global strategy to reduce harmful use of alcohol; national policy/policies on physical activity; policies to control domestic violence and violence against children and women; policies and programmes related to injury prevention; and intersectoral capacity with regard to key national stakeholders in the private sector (industry, agriculture, communications, construction, etc.).

The least–developed areas are nutrition for healthy ageing (30%) and policies and practices related to mental health (40%).

Fig. 7. Assessment results for EPHO 4 (%)

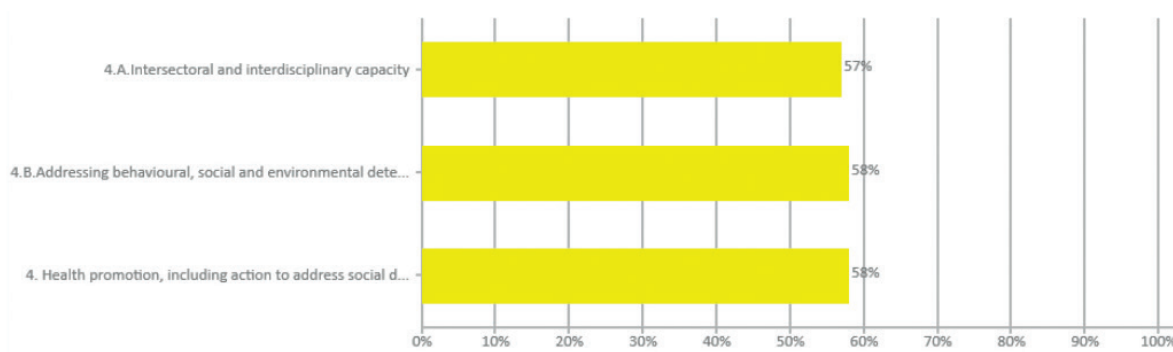


Table 5. Results of EPHO 4 assessment by subfunction (%)

Number	Subfunction	Score (%)
4.A.	Intersectoral and interdisciplinary capacity	
4.A.1.	Structures, mechanisms and processes within government to enable intersectoral decision-making and action, using a health in all policies approach	50%
4.A.2.	Ministry of health engagement and involvement of local communities and civil society in the area of health promotion	70%
4.A.3.	Intersectoral capacity with regard to key national stakeholders in the private sector (industry, agriculture, communications, construction, etc.)	50%
4.B.	Addressing behavioural, social and environmental determinants through a whole-of-government, whole-of-society approach	
4.B.1.	Tobacco policy in line with WHO FCTC requirements	80%
4.B.2.	Alcohol control policy in line with the WHO Global strategy to reduce harmful use of alcohol	50%
4.B.3.1.	Part 1: National nutritional policy framework	70%
4.B.3.2.	Part 2. Infant and early childhood nutrition	80%
4.B.3.3.	Part 3. Childhood and adolescent nutrition	80%
4.B.3.4.	Part 4. Nutrition for healthy ageing	30%
4.B.4.	National policy/policies on physical activity	50%
4.B.5.	Programmes and policies to promote sexual and reproductive health	60%

Number	Subfunction	Score (%)
4.B.6.	Activities to address substance abuse	60%
4.B.7.	Policies and practices related to mental health	40%
4.B.8.	Policies to control domestic violence and violence against children and women	50%
4.B.9.	Policies and programmes related to injury prevention	50%
4.B.10.	Addressing the social determinants of health	50%

Key recommendations

- Strengthen CCPH coordination of the implementation of intersectoral programmes (4.A.2).
- Define the roles and responsibilities of the ministries and agencies involved in the implementation of plans influencing the social determinants of health (4.A.2).
- Allocate a separate line in the MoH budget for prevention programmes among the population (4.A.2).
- Ensure implementation of the WHO FCTC (4.B.1).
- Promote the implementation of the national alcohol control programme (4.B.2).
- **Priority recommendation (low effort–high impact):** Provide regular public education on healthy lifestyles through the VHCs (4.B.10).

STRENGTHS, WEAKNESSES AND AREAS FOR IMPROVEMENT

4.A. Intersectoral and interdisciplinary capacity

Strengths: The Government supports health promotion and has a legislative framework in place to regulate the involvement of various agencies and departments. The implementation of national programmes is reflected in action plans approved at the Government level stipulating the roles and obligations of various parties. The Den Sooluk programme prioritizes the involvement of communities in health promotion.

Weaknesses: Existing mechanisms for communication and collaboration among various sectors for the implementation of health promotion policies and for monitoring the social determinants of health are imperfect. Funds for the implementation of programmes on health protection and promotion are allocated on a residual/leftover basis. Decision-makers at the local level and in local communities lack commitment to implementing preventive programmes, which results in a lack of political and financial support (programmes are implemented with the support of international organizations). There are no mechanisms (for example, tax incentives) for motivating representatives of private businesses to become involved in prevention programmes.

Areas for improvement: G; F; RG; SD

4.B. Addressing behavioural, social and environmental determinants through a whole-of-government, whole-of-society approach

Strengths: The country has well developed public policies and strategies for tobacco control, which are updated on a regular basis. Their coordination and supervision are entrusted to the CCPH. The MoH also established a working group to implement measures for tobacco control. A unit and a national coordinator at the RCHP are funded by the state budget on tobacco control and are involved in carrying out international cooperation (for initiatives such as the Kyrgyz–Finnish Lung Health Programme and the Kyrgyz–Swiss CAH project). A revision to the law “On the protection of Kyrgyz citizens’ health from the harmful effects of tobacco” and the long-term national tobacco control programme have been drafted.

Weaknesses: The strong opposition of the tobacco industry, including at the level of the Eurasian Economic Commission, is a barrier to progress. A lack of funding and public/state support for tobacco control also results in a low level of activity on the part of NGOs and civil society. There is a lack of funding for tobacco control from the state budget.

Furthermore, there is no public/state policy and strategy for reducing harm from alcohol consumption. This is in spite of the existence of the Republican Centre for Narcology, which coordinates the promotion of issues related to preventing alcohol abuse.

Nutrition policies currently do not take a life-course approach. Programmes address nutrition in a fragmented way, covering breastfeeding, prevention of iron-deficiency anaemia and iodine deficiency disorders, and organization of hot meals in schools.

Areas for improvement: F; RG; SD

EPHO 5. Disease prevention, including early detection of illness

OVERVIEW

Kyrgyzstan is implementing its national immunization programme for 2013–2017, which was approved by Government Resolution No. 47 (1 February 2013). The programme's strategic areas outline the country's approach to achieving WHO's global goals on reducing morbidity and mortality from vaccine-preventable diseases, and the sustainable, progressive development of immunization service in the country. The programme is integrated with the objectives of the European Vaccine Action Plan (2015–2020) (EVAP), and synchronized with the Den Sooluk programme.

Kyrgyzstan is committed to achieving EVAP's sixth objective: financial stability for national immunization programmes. It is gradually increasing the share of allocations from the national budget for the procurement of vaccines, and fulfilling its commitments on co-financing new vaccines with the Global Alliance for Vaccines and Immunization (GAVI) (GAVI currently contributes 90% and the Kyrgyz Government contributes 10%).

However, according to 2015 WHO/UNICEF figures, Kyrgyzstan's public expenditure for the procurement of vaccines under the WHO expanded programme on immunization was only 49%. Over the past eight years, the scope and cost of running the national immunization programme have both increased significantly. New vaccines (pneumococcus; inactivated polio; rotavirus; human papilloma virus; diphtheria, tetanus and pertussis; hepatitis B; Haemophilus influenzae type b) represent the greatest proportion of increased costs. A funding analysis showed that, due to the introduction of new vaccines, the average cost of immunization has increased from US\$ 5 per child to US\$ 15.

Ensuring adequate and stable funding for the national immunization programme is key. The lack of mechanisms for medium- and long-term financing of supplies and vaccines (both traditional and new) endangers the sustainability of vaccine procurement.

The CAH model is Kyrgyzstan's unique approach to health promotion. Within its framework, more than 1600 VHCs now operate across the country serving a total of 2 110 000 people.

Kyrgyzstan has implemented the WHO PEN protocols – the package of essential NCD interventions for primary health care in low-resource settings – and provides health-counselling services at all levels of the health care system. However, the system is currently focused on treatment rather than prevention.

Maternal and child health is a priority within the Den Sooluk programme. In Kyrgyzstan, overall access to prenatal and postnatal care for pregnant women is high; services are provided everywhere through a large network of health institutions at the primary health care level.

The MoH conducts screening programmes and tests for echinococcus, cancer, hypertension, diabetes and anaemia. In addition, mental health screening is conducted among decreed groups. Various programmes are being implemented to combat diabetes, trauma and injuries, cancer, and cardiovascular and obstructive lung diseases and their risk factors (poor nutrition, smoking, alcohol use, inactivity, high blood pressure).

Kyrgyzstan’s national strategy for palliative care for 2012–2016 and its accompanying action plan were approved. A legislative framework for the delivery of palliative care to the population and to define the role of palliative care within the health care system is under development. A model of outpatient palliative care delivery has been developed; however, there is currently no integration of palliative care services in general health care at all levels. The action plan is underfinanced.

SUMMARY OF RESULTS

Overall, EPHO 5 received a score of 63%, indicating that it is well developed (see Fig. 8 and Table 6). However, while primary and secondary prevention are well developed (73% and 77%, respectively), tertiary/quaternary prevention and social support are poorly developed (40% and 45%, respectively). This is due to a lack of patient support groups (0%) and a lack of support for informal caregivers (30%).

Fig. 8. Assessment results for EPHO 5 (%)

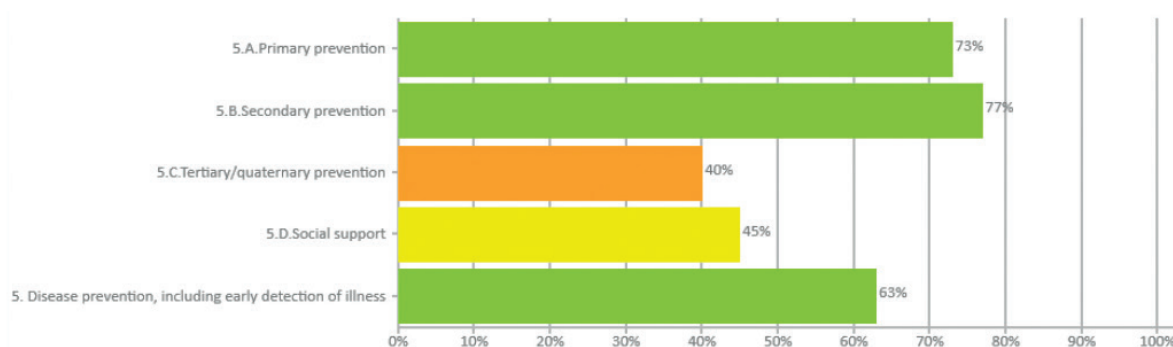


Table 6. Results of EPHO 5 assessment by subfunction (%)

Number	Subfunction	Score (%)
5.A.	Primary prevention	
5.A.1.	Immunization programme	80%
5.A.2.	Provision of information on behavioural and medical health risks in health care settings	80%

Number	Subfunction	Score (%)
5.A.3.	Disease prevention programmes at primary and specialized health care levels	70%
5.A.4.	Provision of maternal and neonatal care programmes	80%
5.A.5.	Country's provision of health services to migrants, homeless people and ethnic minority populations	60%
5.A.6.	National approach to prisons health	70%
5.B.	Secondary prevention	
5.B.1.	Secondary prevention (screening) programmes for the early detection of disease	60%
5.B.2.	Awareness programmes related to early detection of pathologies	70%
5.B.3.	Provision of chemoprophylactic agents to control risk factors for disease	100%
5.C.	Tertiary/quaternary prevention	
5.C.1.	Rehabilitation, survivorship and chronic pain management programmes	60%
5.C.2.	Access to palliative and end-of-life care	60%
5.C.3.	Capacity to establish patient support groups	0%
5.D.	Social support	
5.D.1.	Programmes aimed at creating and maintaining supportive environments for healthy behavioural change	60%
5.D.2.	Support for caregivers	30%

Key recommendations

- **Priority recommendation (low effort–high impact):** Develop a national immunization programme with an action plan and budget for 2018–2022 (5.A.1).
- Increase funding for activities focused on the primary prevention of NCDs (5.A.3).
- Define the order and methods for financing palliative care at all levels of health service delivery (5.C.2).

STRENGTHS, WEAKNESSES AND AREAS FOR IMPROVEMENT

5.A. Primary prevention

Strengths: The country has a legislative framework for the integration of primary prevention of infectious diseases (including vaccination) at the level of primary health care. Prevention measures for NCDs have been introduced, and primary prevention services are provided to pregnant women and newborns. Through the VHCs, new practices and mechanisms for engaging local communities in health promotion have been implemented.

Weaknesses: The health care system remains focused on treatment rather than prevention and social/behavioural risk factors. There is a need for coordinating activities with other partners

involved in the primary prevention of disease at primary and specialized health care levels. There is also a need for mechanisms for medium- and long-term financing for supplies, including vaccines.

Areas for improvement: G; F; RG

5.B. Secondary prevention

Strengths: Secondary prevention programmes (screening) for early detection are carried out for echinococcosis, cancer, hypertension, diabetes and iron-deficiency anaemia. VHCs across the country are actively involved in community-based health promotion through various campaigns to increase public awareness of early detection.

Weaknesses: Health services are actively engaged in the implementation of secondary prevention programmes, but the population does not take a proactive approach in this area.

5.C. Tertiary/quaternary prevention

Strengths: The country has a legislative framework for the provision of palliative care, including the national strategy for palliative care, and has defined the role of palliative care in the health care system. The model of outpatient palliative care is well developed.

Weaknesses: Palliative care services are not integrated into all levels of the health care system, and the funding plan for implementing the national strategy for palliative care has not yet been developed. Patient support groups are currently being established, and organizational mechanisms and standard operating procedures are being developed.

Areas for improvement: G; F; RG

5.D. Social support

Strengths: Representatives of different sectors (civil society organizations, NGOs, international organizations and bilateral partners) are engaged in developing documents, regulations and favourable conditions for the formation of healthy behaviours.

Weaknesses: There is no legislative framework to ensure the financial and social rights of caregivers.

Areas for improvement: F

EPHO 6. Assuring governance for health and well-being

OVERVIEW

The current legislative framework for public health in Kyrgyzstan does not meet modern requirements and approaches to health protection and promotion. Neither does it sufficiently reflect the functional activity of national public health agencies in terms of state sanitary-epidemiological regulations, legal status, rights and powers of public health authorities and chief state sanitary doctors, etc. This is due to the fact that the law “On public health” was adopted in 2009, but appropriate subordinate legal acts have not been adopted to date.

Structurally, Kyrgyzstan’s public health service remains fragmented. It suffers from a low material and technical base, and laboratories that are insufficiently supplied with up-to-date equipment and reagents. Reductions in the number and frequency of inspections, imperfect mechanisms for issuing/receiving reference documents for inspections, insufficient interaction with state regulatory agencies, low motivation and chronic outflow of skilled personnel have all had a negative impact on the implementation of control and surveillance functions. This has also led to a decrease in the quality of primary and secondary prevention of communicable diseases and NCDs.

Health promotion activities are coordinated by the RCHP. Activities are integrated into primary health care through health promotion units (HPUs) created at family medicine centres. HPUs at the regional, district and municipal levels are introducing new types of interactive, community-based activities based on findings from needs-assessment surveys. This new model is engaging urban populations in health promotion.

The bottom-up approach of the CAH programme is Kyrgyzstan’s most successful model of health promotion in rural areas. CAH is institutionalized and is currently being rolled out to other regions. However, health promotion activities are largely dependent on international and donor organizations, which can impact their long-term sustainability. New mechanisms for publicly funding health promotion activities are needed.

Public health protection measures are provided by the DDPSSSES, the RCI, the RCQEDI, the Republican AIDS Centre, and the SPCPM, as well as by relevant departments at the regional, district and municipal levels.

In connection with Kyrgyzstan’s accession into the EACU and the EAEU, and to implement the action plan approved by Government Resolution No. 445 (August 2014), work was initiated to harmonize technical regulations with EACU and EAEU requirements. More than 63 documents were revised in the area of sanitary measures under the framework of the EACU. Among other initiatives, efforts have been made to supply the centres of disease prevention and sanitary-epidemiological surveillance at national border checkpoints with necessary laboratory equipment.

Maintaining the health security of the population is a major challenge for the country. Ensuring that mechanisms are in place to efficiently and effectively manage health risks while fostering intersectoral cooperation necessitates addressing all key areas of the International Health Regulations (IHR).

In the face of more frequent and intense biological threats, outbreaks of viral infections and other possible risks, it is critical that the country has a special biological laboratory (biosafety level 3) that meets international requirements.

Considering the multiple economic, epidemiological and demographic issues affecting rates of infectious diseases, NCDs and overall population mortality, it is clear that population health and well-being are social issues that touch on every aspect of society both within the country and beyond. Accordingly, solutions to complex problems must embody a whole-of-government, whole-of-society approach. The CCPH was established under the Government to address public health challenges by working across sectors in this way; however, the mechanisms of the Technical Secretariat's work have not yet been established.

A review of the financial condition of the state centres of disease prevention and sanitary-epidemiological surveillance indicated that the current per capita financing system does not allow the public health system to meet its needs and objectives. Neither does it allow the health protection service to ensure epidemiological surveillance and sanitary control of all supervised facilities. New financing mechanisms that take into account functions performed as well as type and volume of work are needed, as is a system of sustainable financing for vaccines procurement.

To create an optimized public health service – driven by the needs of the population, based on broad intersectoral cooperation, and featuring active community engagement for health protection and promotion – public health services must be reoriented and improved. This is particularly true in terms of fostering a culture of health and well-being, educating the population about social and behavioural risk factors, strengthening intersectoral cooperation, and working to achieve the objectives of national programmes and strategies for sustainable development as well as the MDGs.

SUMMARY OF RESULTS

Overall, EPHO 6 received a score of 45%, indicating that it is moderately developed (see Fig. 9 and Table 7).

The low score for regulation and control (6.C; 25%) indicated weak development, particularly with regard to the country's capacity for health impact assessments (20%) and health technology assessments (20%). Improvement is required in the planning of national, regional and local strategies, plans and policies for public health (30%) and the performance of situation analyses prior to formulating plans or strategies (40%).

Fig. 9. Assessment results for EPHO 6 (%)

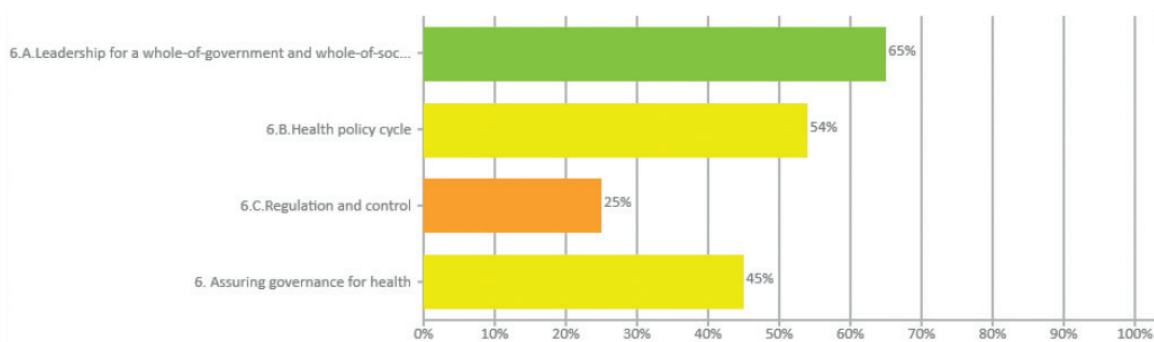


Table 7. Results of EPHO 6 assessment by subfunction (%)

Number	Subfunction	Score (%)
6.A.	Leadership on a whole-of-government and whole-of-society approach to health and well-being	
6.A.1.	National government's commitment to health and health equity as a priority in national policy	70%
6.A.2.	Governance for health	60%
6.B.	Health policy cycle	
6.B.1.	Mechanisms for stakeholder participation in the health policy cycle	80%
6.B.2.	Situation analyses prior to formulating plans or strategies	40%
6.B.3.	Planning of national, regional and local strategies, plans and policies for public health	30%
6.B.4.	Implementation of strategies, policies and plans for public health	60%
6.B.5.	Monitoring and evaluation activities embedded in strategies and policies on public health	60%
6.C.	Regulation and control	
6.C.1.	Ministry of health's ability to develop, enact and implement appropriate national legislation to improve public health and promotion of a healthy environments and behaviours, aligned with regional and global commitments	60%
6.C.2.	Performance of health impact assessments	20%
6.C.3.	Performance of health technology assessments	20%
6.C.4.	(For European Union Member States) Short-, medium- and long-term strategies to comply with a European Union community health services system	0%

Key recommendations

- **Priority recommendation:** Develop a national strategy and relevant legislation for improving public health services (6.B.4). This will require:
 - describing the new structure of public health services and organizations (including staff, budget and financing);
 - reinvesting funds for the development of public health services;
 - describing the role and functions of the PHO regarding management and leadership, and considering the possibility of improving and reorganizing the PHO into the Department of Public Health under the MoH;
 - harmonizing regulations and legislation with the requirements of the EACU and EAEU;
 - implementing common standards;
 - accepting the international certificates of the EACU and EAEU; and
 - exploring the possibility of establishing a Kyrgyz agency for the surveillance of consumer products.
- Develop specialists on monitoring and evaluating public health services (6.B.5).
- Develop impact assessment tools (6.C.2).

STRENGTHS, WEAKNESSES AND AREAS FOR IMPROVEMENT

6.A. Leadership on a whole-of-government and whole-of-society approach to health and well-being

Strengths: A unit under the Parliament Committee on Social Affairs, Education, Science, Culture and Public Health supervises public health issues at the level of the Government. Intersectoral cooperation and coordination is also facilitated by the CCPH. A legislative framework is in place and work is carried out according to regulatory and legal acts.

Weaknesses: The Parliament and the Prime Minister's Office are not sufficiently engaged in addressing public health challenges and issues; as a result, resources, governance and coordination are insufficient.

Areas for improvement: G; RG

6.B. Health policy cycle.

Strengths: A regulatory framework and intersectoral strictures are in place to engage stakeholders in the health policy cycle. Existing national and state public health programmes are aligned with international goals recommended by WHO and the international community. These include, among others, the Den Sooluk programme for 2012–2016, a strategy for public health protection and promotion until 2020 (the national Health 2020 strategy), a programme on NCD prevention and control for 2013–2020, and a national immunization programme for 2013–2017.

Weaknesses: Progress is impeded by inadequate work on the part of the CCPH Technical Secretariat, as well as by lack of funding, resources, information and communication

technologies (ICT) and human resources in other sectors to address public health issues. Also of concern is the lack of electronic communication with other ministries and departments, and the shortage of research-based evidence in public health. Personnel qualified in public health monitoring and evaluation are needed.

Areas for improvement: G; F; RG

6.C. Regulation and control

Strengths: A regulatory and legislative framework dictates the role of the MoH in developing and ensuring adoption and implementation of relevant national legislation consistent with regional and global commitments. This is aimed at improving public health and promoting healthy environments and behaviours.

Weaknesses: There are no public health service regulations for the Chief State Sanitary Doctor of the Kyrgyz Republic.

Areas for improvement: G; F; RG; SD

EPHO 7. Assuring a sufficient and competent public health workforce

OVERVIEW

A variety of programmes in Kyrgyzstan are aimed at strengthening the country's public health workforce. While efforts have been made to encourage professionals to work in remote areas, however, high staff turnover and outflows due to low financial incentives in rural health care facilities continue. This leads to lower labour productivity in rural areas than at national and regional levels.

Strategic planning for human resources development is carried out by management structures in compliance with intersectoral and interdepartmental agreements. However, the planning process does not take into account the needs of regional public health institutions. To ensure an even distribution of professionals throughout the country, admission to undergraduate and postgraduate programmes at the country's medical universities should be granted to a specified number of students from each region, and graduates should be placed in residencies accordingly.

In general, a normative legal and policy framework guides human resources development in the country. However, as strategic planning does not take place in remote and difficult-to-access areas, there is an urgent need for programmes that attract professionals to work in these districts. These programmes could include incentives (set up with the assistance of local authorities) such as subsidized housing, the allocation of plots for building homes, rural surcharge coefficients, and increased wages according to remoteness, altitude, and other geographical and climatic factors.

Monitoring and evaluation of the quality of outputs takes place regularly through the mandatory provision of feedback at board meetings and specialized meetings of the Republican Emergency Antiepidemic and Antiepzootic Commission under the Government, and of the Country Coordination Mechanism for the Global Fund to Fight AIDS, Tuberculosis and Malaria. However, evaluation and analysis of the work performed at district and municipal levels is substandard.

Human resources management includes employing experts with proper documentation (for example, a diploma or certificate) and defining a scope of work for each position. The competence of specialists is assessed through a certification process that includes the assignment of a qualification category. However, regulations on evaluating specialists' performance remain undeveloped due to heavy workloads within operational departments. Currently there are no employee standards, and some medical positions are occupied by individuals without a medical background (for example, by biologists, chemists or zoologists).

The "Doctor Deposit" programme was introduced in 2003 to attract and retain young specialists through mandatory 2-year work placements after graduation from medical training. However, these measures have not been effective enough and require improvements.

Current labour legislation and the country's licensing and accreditation system form the basis for developing public health human resources. However, these are impeded by low wages for public health workers and low financing for the specialist support programme that defines the performance of functional responsibilities as well as professional duties. This programme must be revised in order to apply more appropriate parameters for performance evaluation.

Public health specialists are trained at one of six educational institutions with approved standards and licences. However, not all universities have sufficient clinical sites for students' practical training. This being so, licences should be issued only to universities with sufficient faculties, clinical sites and technical equipment. Efforts to integrate university programmes with other educational, practical and academic institutions, as well as those in neighbouring and more distant countries, should be made.

Educational processes are subject to standards and licences. However, health care professionals are not sufficiently involved in the educational process due to a lack of clinical sites and a lack of funding to pay them; subsequently, student–teacher ratios exceed the norm. Efficient, high-quality undergraduate and postgraduate training requires the establishment of additional clinical sites at universities and a reduction of the number of students in each group.

All levels of education exist in Kyrgyzstan: students can pursue an undergraduate degree (5 years), a postgraduate internship (1 year), a clinical residency (2 years), a postgraduate degree (3 years) and a doctoral degree (4 years). Public health disciplines are taught at all levels. Students' motivation to excel in the education system is poor, however, due to inadequate scholarships for academic performance. The system must be improved in order to encourage and support excellence among students.

Students can gain experience by studying in foreign educational institutions, and specialists can seek grants for advanced training and retraining outside the country. Increasing the availability of foreign training as well as opportunities for exchanging teachers with advanced foreign medical schools would improve performance in Kyrgyzstan.

SUMMARY OF RESULTS

Overall, EPHO 7 received a score of 55%, indicating that it is moderately developed (see Fig. 10 and Table 8).

The most problematic area is governance of public health human resources (7.D; 40%), mainly due to poorly developed structures and arrangements for strategic partnerships in the development of human resources for public health (30%).

The key barrier to improving overall performance is inadequate financing for public health human resources (40%). Despite the fact that Kyrgyzstan's universities annually train a sufficient number of young specialists, the country experiences a constant shortage of personnel due to a lack of incentives for young professionals to specialize, and a high demand for experienced professionals abroad and in the private health sector.

Fig. 10. Assessment results for EPHO 7 (%)

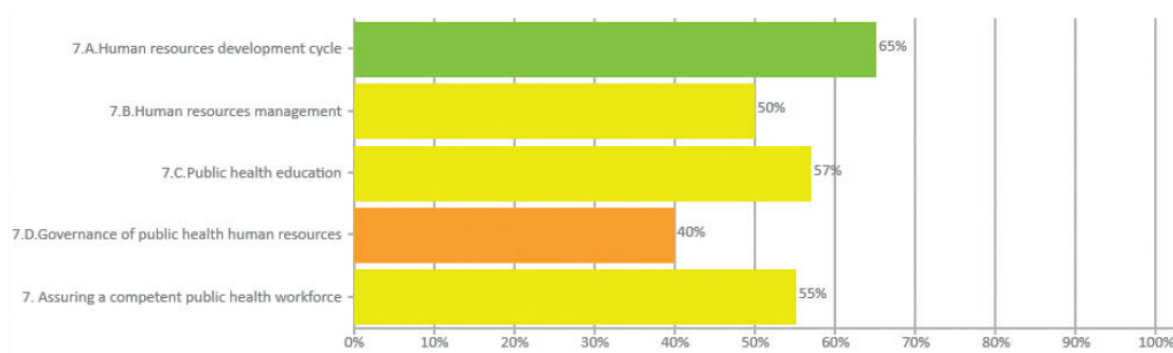


Table 8. Results of EPHO 7 assessment by subfunction (%)

Number	Subfunction	Score (%)
7.A.	Human resources development cycle	
7.A.1.	Situation analysis phase in human resources development strategy	70%
7.A.2.	Planning phase in human resources development strategy	60%
7.A.3.	Implementation phase in human resources development strategy	70%
7.A.4.	Monitoring and evaluation phase in human resources development strategy	60%
7.B.	Human resources management	
7.B.1.	Human resources management systems in the field of public health	50%
7.B.2.	Recruitment and retention practices with regard to human resources for public health	50%
7.B.3.	Policies pertaining to development of human resources in public health	60%
7.B.4.	Financing of human resources for public health	40%
7.C.	Public health education	
7.C.1.	Educational institutions for public health (including epidemiology, community or social medicine and other units with similar mandates)	50%
7.C.2.	General education issues, as they pertain to core public health professionals	50%
7.C.3.	Public health curricula	70%
7.D.	Governance of public health human resources	
7.D.1.	Leadership and management of human resources for public health	50%
7.D.2.	Structures and arrangements for strategic partnerships in the development of human resources for public health	30%

Key recommendations

- Priority recommendation (low effort–high impact): Develop regulations to strengthen the responsibilities of postgraduates and employers to attract public health specialists at the level of primary health care (7.B.1).
- Priority recommendation (low effort–high impact): Develop qualification requirements for public health specialists, as well as workload norms (7.B.3).
- Priority recommendation: Increase state standards for the education of public health specialists from five to six years (7.C.3).
- Increase cooperation with other countries and organizations with regards to training students and establishing exchange programmes for students, teachers and specialists (7.D.2).

STRENGTHS, WEAKNESSES AND AREAS FOR IMPROVEMENT

7.A. Human resources development cycle

Strengths: The country has the management structures to plan, organize and develop public health human resources, as well as a legislative framework and programmes aimed at encouraging professionals to work in remote areas.

Weaknesses: Despite the existence of legislative and policy frameworks, monitoring and evaluation of human resources development and programmes to attract young specialists to work in Kyrgyzstan’s regions are inadequately implemented.

Areas for improvement: F; RG; SD

7.B. Human resources management

Strengths: Within the framework of the current public health human resources management system there are programmes to attract and retain professionals in remote areas, such as the “Doctor Deposit” programme.

Weaknesses: Financing of public health human resources is very low, and additional-payment programmes to attract and retain personnel, including young specialists, have still failed to establish adequate wages for professionals.

Areas for improvement: F; RG; SD

7.C. Public health education

Strengths: Kyrgyzstan has six educational institutions with approved standards and licences to train public health professionals (including specialists in epidemiology, hygiene, social medicine, etc.). The curricula of these institutions cover all levels of education.

Weaknesses: Not all universities have sufficient technical equipment or clinical sites, and many lack integration with practical institutions that allow students to develop applied skills. There are no opportunities for faculty members to upgrade their skills, and limited opportunities to participate in international scientific conferences or undertake student/professor exchanges in other countries.

Areas for improvement: G; F; RG

7.D. Governance of public health human resources

Strengths: Health workers' interests are protected by the law "On the status of health workers", the Trade Union of Health Care Workers and the Kyrgyz Association of Public Health.

Weaknesses: Normative legal acts for the strategic management of public health human resources require improvement. A responsible agency must be identified for the leadership and management of public health human resources. It is also necessary to develop a model for building strategic partnerships for the formation of public health human resources; this includes strengthening cooperation among scientific/educational institutions and public health institutions, and entering into agreements with public and private health sectors.

EPHO 8. Assuring sustainable organizational structures and financing

OVERVIEW

Public health institutions contribute to the protection and promotion of population health. Kyrgyzstan has a clearly organized management scheme in this area, and work is conducted at each level in accordance with the functions defined in organizations' regulations and charters. However, not all functions are consistently carried out, and many require revisions and improvements.

To optimize public health services and avoid conflicts of interests in the area of state surveillance and control, the Government implemented service reform. This involved establishing the SIVPS under the Government with residual resources from the DDPSSSES, regional centres of disease prevention and sanitary-epidemiological surveillance, and the departments of veterinarian services and phytosanitary services. However, reform was ineffective due to a lack of resources (financial and human), an absence of infrastructure, and a misguided approach to state surveillance and control. Thus the function of sanitary surveillance was later returned to the DDPSSSES.

In 2013, to rationalize mechanisms for the surveillance of infectious diseases and NCDs, the DDPSSSES was merged with the RCQEDI. This separated the functions of surveillance and sanitary control. Yet, due to a lack of coordination and management mechanisms, an ineffective use of resources and a lack of strategic vision, the institutions were separated and staffing was updated accordingly.

Some reorganization measures were undertaken within the DDPSSSES: the unit on monitoring, assessment and prognosis (established under the Den Sooluk programme to optimize the quality of data) was abolished. Currently, the public health system does not have an analytical centre or unit to conduct monitoring, assessment and analysis of data in the areas of disease prevention, health protection, trends in the occurrence of infectious diseases, or correlations between work on health protection and other factors.

Efforts to reform public health services have been stalled by an absence of regulations and mechanisms for reinvesting resources into the health system. For future reforms, it will be critical to develop regulations for staffing, funding and the reinvestment of resources.

In general, there is large workforce of health specialists in the country with both general and specialized profiles. However, health care organizations in remote and difficult-to-access areas lack specialists as well as modern medical equipment and technology, and have not adequately introduced electronic health records.

All laboratories at the national level, and some at the regional level, are accredited and meet modern requirements. Laboratories within district and municipal public health organizations, however, have a poor material and technical base and lack qualified specialists. This reduces the quality of laboratory diagnoses and weakens the entire network of antiepidemic efforts.

In general, 20% of public health laboratories in the country are accredited and participate in proficiency testing programmes on annual basis. The national policy and strategy for laboratory service development are currently being developed. Inadequate funding, poor physical infrastructure (buildings, equipment, consumables), poor training of staff (at both the undergraduate and postgraduate level), lack of motivation on the part of laboratory unit specialists, and an imperfect legislative framework all have a negative impact on the quality of work at the primary health care level.

The SPCPM functions as a national public health institute, carrying out scientific activities in the field of public health and health care in compliance with regulations and a charter approved by Government Resolution No. 267 (22 May 2014). It is responsible for research on issues of communicable diseases and NCDs, and for training qualified scientific personnel for public health. To better specify public health policies and practices, it will be important to update the title of the SPCPM, to make necessary adjustments to its structure and to strengthen its laboratories.

Legal norms for public health protection are provided by public health institutions, which have their own approved work plans and reporting forms. There is a clear organization management scheme in case of emergencies such as outbreaks of infectious diseases, and a comprehensive action plan involving other agencies and the public health service.

There is an approved monthly statistical reporting form as well as computer software for tracking infectious and parasitic diseases and NCDs (such as iodine-deficiency disorders and iron-deficiency anaemia). The coordination role is assigned to the MoH, the Republican Emergency Antiepidemic and Antiepzootic Commission under the Government, and the Country Coordination Mechanism of the Global Fund. Staffing levels are nevertheless insufficient. This requires a systematic approach to the distribution of graduates across all public health levels and incentives to increase the retention of specialists.

NGOs and international agencies including GAVI; the Global Fund; the Swiss Red Cross; the United Nations Development Programme; the United States Agency for International Development; WHO; and the World Bank contribute to public health promotion in Kyrgyzstan. However, their efforts are often uncoordinated and scattered.

Synergies among the MoH and other stakeholders such as the DDPSSSES, the Ministry of Education and Sciences, the Ministry of Emergency Situations, the Ministry of Internal Affairs, the Ministry of Transport and Communications, the RCHP, the RCQEDI and the SIVPS yield good results, and yet the lack of financial and human resources significantly reduces the quality of implemented measures.

Finances for public health service institutions are provided by one line on the state budget. Institutions then distribute allocated funds according to actual need, which enables them to exclude ineligible expenditures. Currently, the MoH allocates 4–5% of the total health care budget to the public health service, but these funds do not cover all institutional needs.

Unmet needs include modern medical equipment, vehicles, repairs to buildings, international training for specialists, and incentives and benefits to retain specialists in the service (such as accommodation or land for house construction, funds to purchase solid fuel, payment of utilities, etc.).

The majority of funds are spent on salaries. This impedes improvements to the health care system's material and technical base, its performance, and the professional development of its staff. The authors therefore recommend that funding for the public health service is increased to 10% of the total health care budget.

SUMMARY OF RESULTS

Overall, EPHO 8 received a score of 52%, indicating that it is moderately developed (see Fig. 11 and Table 9). While there is political support for progress in this area, much work remains to be done.

The least-developed subfunction is national public health institutes and/or schools of public health (20%). While the SPCPM carries out scientific activities in the field of public health and health care in compliance with regulations and a charter approved by a Government resolution, it is funded on a residual/leftover basis.

Currently, regional and district laboratories have sophisticated equipment; however, more effort is required to improve the public health laboratory system for routine diagnostic services (50%) and decision-making criteria on resource allocation for public health (50%). An insufficient public health budget within the health system (40%) is the main barrier to progress, and affects the development of all EPHOs.

Fig. 11. Assessment results for EPHO 8 (%)

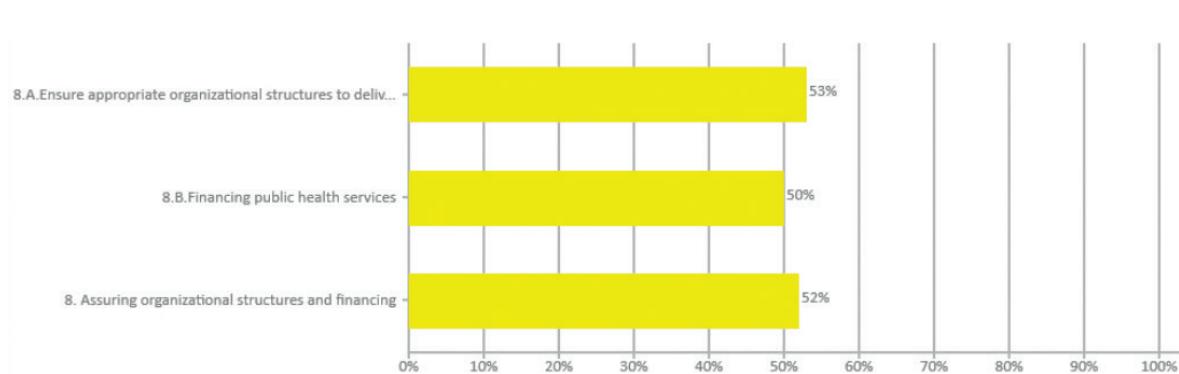


Table. 9 Results of EPHO 8 assessment by subfunction (%)

Number	Subfunction	Score (%)
8.A.	Ensure appropriate organizational structures to deliver EPHOs	
8.A.1.	Clarity and coherence of the organizational structure of the ministry of health (or equivalent) and its linkage with independent public agencies on health	60%
8.A.2.	Basic quality criteria for health care centres that deliver EPHOs (primary health care, specialized health centres and hospitals)	60%
8.A.3.	Public health laboratory system for routine diagnostic services	50%
8.A.4.	National public health institutes and/or schools of public health	20%
8.A.5.	Enforcement structures in place to ensure proper public health protection	60%
8.A.6.	Coordination of services delivered outside government bodies	60%
8.A.7.	Oversight of the systems and organizational structures that perform EPHOs	60%
8.B.	Financing public health services	
8.B.1.	Public health budget within the health system	40%
8.B.2.	Mechanisms to fund public health services delivered outside the health system	60%
8.B.3.	Decision-making criteria on resource allocation for public health	50%

Key recommendations

- **Priority recommendation:** Develop criteria for the assessment of public health services, including laboratories (8.A.2).
- Analyse the workload of laboratories for the purposes of redistribution, and develop an optimal algorithm for the transportation of laboratory materials (8.A.3).
- **Priority recommendation (low effort–high impact):** Review the mandate and title of the SPCPM and reorganize it to cover the entire range of modern public health services (8.A.4).
- Develop and approve a mechanism for forming and distributing the public health budget (8.B.1).
- **Priority recommendation:** Under the public health services strategy develop a mechanism for reinvesting resources into the public health system (8.B.1).
- Develop and approve a mechanism for forming and distributing the public health budget outside of the health system (for emergencies, outbreaks, poisonings, etc.) (8.B.2).
- **Priority recommendation:** Develop a mechanism for funding preventive and antiepidemic measures under a single-payer system for public health services (8.B.3).

STRENGTHS, WEAKNESSES AND AREAS FOR IMPROVEMENT

8.A. Ensure appropriate organizational structures to deliver EPHOs

Strengths: A coherent organizational structure for the MoH and health care institutions is in place. A clear management scheme and specified functions are defined and enshrined in the regulations and charters of organizations at every level of the public health service. Public health laboratory services at the secondary and to some degree the tertiary level are GOST ISO/IEC 17025-accredited and participate in proficiency testing programmes. The MoH is currently developing the national policy and strategy for laboratory service development.

Weaknesses: The country's main challenges, especially in remote and difficult-to-access areas, are related to inadequate staffing, inadequate medical equipment and poor introduction of electronic health records in public health institutions. Public health laboratory services for performing routine diagnostic services at district and municipal levels are characterized by an inadequate material and technical base and a lack of specialists. This reduces the quality of laboratory diagnoses and weakens the entire network of antiepidemic efforts.

Despite the fact that Kyrgyzstan has an institution with highly qualified research staff ready to take on the functions of a national public health institute (SPCPM), there is no state order for conducting research in the area of public health; hence, laboratory equipment is not upgraded, consumables are not procured and staff travel expenses are not compensated.

Areas for improvement: G; F; RG; SD

8.B. Financing public health services

Strengths: Finances for public health service institutions are provided by one line on the state budget, which allows institutions to distribute allocated funds according to actual need and exclude ineligible expenditures.

Weaknesses: No funds are secured for the procurement of medical and laboratory equipment, the maintenance of vehicles, repairs to premises and buildings, etc. This leaves institutions under-equipped for ensuring the health and well-being of the populations they serve.

Areas for improvement: G; F; RG

EPHO 9. Advocacy, communication and social mobilization for health

OVERVIEW

Advocacy, communication and social mobilization are some of the public health system's most important tools for health promotion and protection. At present, Kyrgyzstan has developed and approved communication strategies for the prevention of tuberculosis (2011), for the prevention of HIV (2011) and for safe motherhood (2014).

While a coordinating body is not defined within the structure of the MoH, several organizations perform this function. The RCHP has a multilevel structure that includes, among others, the HPUs and VHCs. The structure of the DDPSES includes 50 district centres of disease prevention and sanitary-epidemiological surveillance whose terms of reference and scope of work include health education, communication and social mobilization. The Press Service within the MoH performs similar functions. The DDPSES produces monthly bulletins and annual reports on incidence of diseases and status of environmental factors; in addition, regional centres inform the public on these issues through the media on a quarterly basis.

The MoH supports the development of advocacy, communication and social mobilization by pursuing policies in this area, providing a structure and establishing relationships both internally and with other relevant agencies and local government bodies. Nevertheless, its collaboration with the media is insufficient, largely due to financing. There is also a lack of clearly defined communication objectives, and the priorities, duties and responsibilities of involved services and agencies are not well established. Neither is there a clear hierarchy of responsibility within the MoH for work in this area.

Kyrgyzstan does not have a single unified communication strategy for intersectoral work; it lacks a vision, measurable objectives, procedures for permission, a clearly defined target audience and methods of assessment. Monitoring and evaluation of public health communication campaigns are not carried out. Addressing these issues requires the development of guidelines on communication (including for risk management) for the public health service.

A communication strategy that identifies main areas of work, objectives, activities, timing of implementation and a responsible agency is needed. A department of communication and social mobilization with specific functions, powers and responsibilities in this area must also be established. Its functions would include including organizing and integrating communication models, developing the use of media resources, monitoring and evaluating public health communication campaigns, and drafting procedures for their implementation.

SUMMARY OF RESULTS

Overall, EPHO 9 received a score of 66%, indicating that it is well developed (see Fig. 12 and Table 10).

The country has a well developed strategic and systematic approach to public health communications (9.A; 66%) and efforts are being made to employ ICT for health (9.B; 70%). While structural and legislative frameworks for public health communications are in place, however, communications strategies in the public health system are disconnected and fragmented, and a unified approach is lacking.

Fig. 12. Assessment results for EPHO 9 (%)

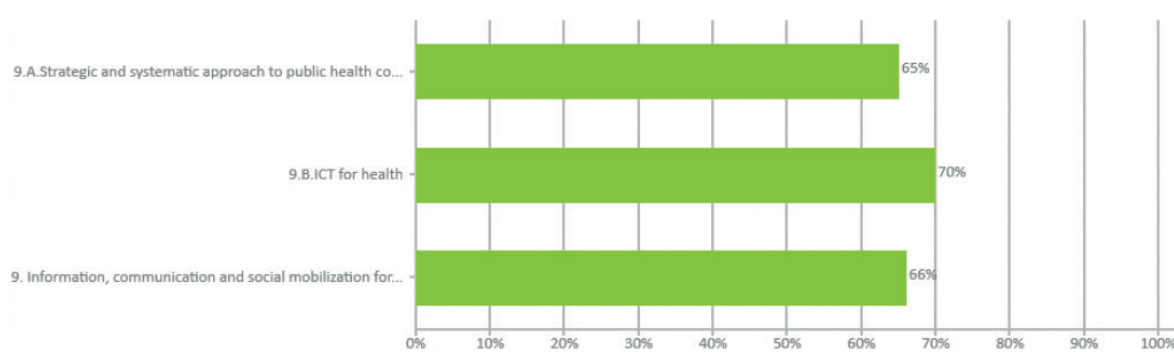


Table 10. Results of EPHO 9 assessment by subfunction (%)

Number	Subfunction	Score (%)
9.A.	Strategic and systematic approach to public health communications	
9.A.1.	Communication concepts within the ministry of health	60%
9.A.2.	Organization of health communication	70%
9.A.3.	Integration of communication strategies within priority public health programmes	60%
9.A.4.	Implementation of risk communication activities	60%
9.A.5.	Use of resources in communication and social mobilization efforts	70%
9.A.6.	Capacity to monitor and evaluate public health communication campaigns	70%
9.B.	ICT for health	
9.B.1.	Ministry of health's approach to ICT for health	70%

Key recommendations

- Priority recommendation (low effort–high impact): Develop guidelines on communication for the public health service, including for risk management (9.A.1).
- Priority recommendation (low effort–high impact): Involve the population in health protection and promotion through social mobilization and intersectoral cooperation (9.A.5)

STRENGTHS, WEAKNESSES AND AREAS FOR IMPROVEMENT

9.A. Strategic and systematic approach to public health communications

Strengths: The MoH recognizes the need for the practical implementation of a single, unified approach to public health communications. Structural and legislative frameworks as well as a coordinating organization (the RCHP) are in place for this. Relationships are established both within the MoH and between the MoH and other concerned agencies and local government bodies.

Weaknesses: Mechanisms for communicating about and promoting health issues are underdeveloped. Efforts to engage the media in this area have been poorly organized, and funding is lacking for social mobilization. There is no unified public health communications model with clearly defined objectives, priorities, and list of relevant services and agencies with assigned duties and responsibilities; neither is there a clear hierarchy of responsibility for the work in this area within the MoH.

Areas for improvement: G; F; RG

9.B. ICT for health

Strengths: The MoH is aware of the need to introduce ICT into the health care system.

Weaknesses: Lack of funding hinders the introduction of ICT.

Areas for improvement: G; F; RG

EPHO 10. Advancing public health research to inform policy and practice

OVERVIEW

Kyrgyzstan's national policy on research is based on Law No. 92 "On education" (30 April 2003), Law No. 128 "On innovation activity" (26 November 1999) and Law No. 1485-XII "On science and the fundamentals of state scientific and technical policy" (15 April 1994).

The following state agencies and organizations carry out oversight and control functions in the sphere of science: the Supreme Attestation Commission of the Kyrgyz Republic, the State Service of Intellectual Property and Innovations under the Government, and the National Academy of Sciences of the Kyrgyz Republic.

Research activities are selected for priority funding through a competitive application process, subject to the approval of the Scientific and Technical Council of the Department of Science at the Ministry of Education and Sciences. Priority areas are determined by considering those of national programmes as well as the results of patent information searches performed by researchers.

The main barrier to public health research in the country is inadequate funding. Funding is provided if the Department of Science approves and supports a research grant application, but covers only wages. Researchers must then seek additional sources of funding to conduct studies, cover travel expenses, purchase laboratory supplies, etc.

Access to data for carrying out scientific research in the field of public health is also inadequate. Accessible information is aggregated and thus inconvenient for analyses. Researchers do not have open access to information in digital format or on electronic media (that is, disaggregated by gender, age, urban/rural residence, class of disease, cause of death, etc.). Scientific and research institutions make information available upon request and on a paid basis, but these fees are often a burden for researchers.

To support and stimulate the labour of young scientists engaged in research, address the urgent social and economic problems of the country, and acknowledge the 25th anniversary of the Kyrgyz Republic's independence, the Government approved the regulation "On the procedure for young scientists' grants of the Kyrgyz Republic" and established 25 research grants for young scientists in all fields of science. This is in accordance with the law "On science and the fundamentals of state scientific and technical policy" and articles 10, 11 and 17 of the Constitutional Law "On the Government of the Kyrgyz Republic".

Grants are awarded to young scientists on the basis of competitive selection. Selection is carried out by the Department of Science based on the recommendations of independent expert councils in various areas of science, and is agreed with the Council for Science and Innovation under the

Prime Minister. In spite of these efforts, however, the outflow of young scientists continues, both abroad and within the country – many scientists turn to practical health care for higher wages and better technical and laboratory capacity in this field.

SUMMARY OF RESULTS

Overall, EPHO 10 received a score of 35%, indicating that this area is poorly developed (see Fig. 13 and Table 11).

The most underdeveloped area is that of capacity-building (10.B; 28%), largely due to inadequate performance of research in public health practice (10%), integration of research activities in public health education and continuous training (20%), data access to health indicators for researchers (30%) and, as a result, capacity for innovation in public health (30%).

Moderately developed subfunctions include identification of national public health research priorities (50%), alignment of the public health research agenda with Health 2020 (40%); maintenance of scientific and ethical standards in research (50%) and research coordination (40%).

Mechanisms and structures to disseminate research findings to public health colleagues are underdeveloped (30%), as are mechanisms to translate evidence into policy and practice (40%). Policy-makers must also more effectively communicate their needs to the research community, including health technology firms (50%).

Fig. 13. Assessment results for EPHO 10 (%)

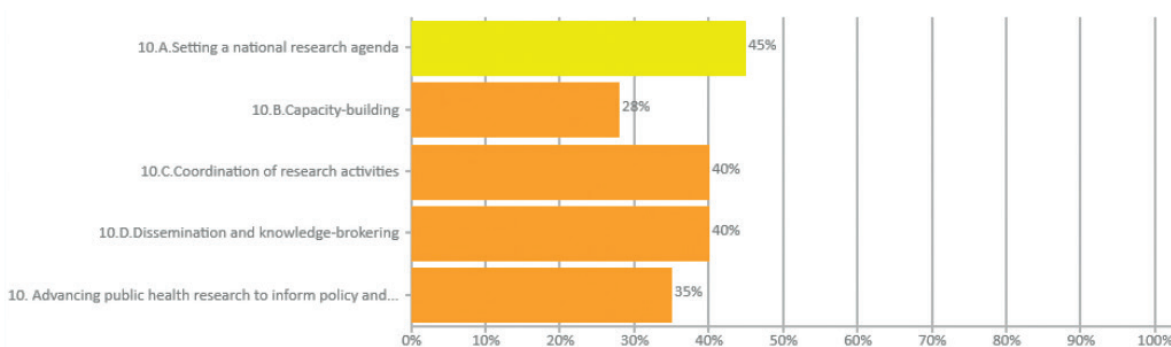


Table 11. Results of EPHO 10 assessment by subfunction (%)

Number	Subfunction	Score (%)
10.A.	Setting a national research agenda	
10.A.1.	Identification of national public health research priorities	50%
10.A.2.	Alignment of public health research agenda with Health 2020	40%
10.B.	Capacity-building	
10.B.1.	Data access to health indicators for researchers	30%
10.B.2.	Integration of research activities in public health education and continuous training	20%
10.B.3.	Performance of research in public health practice	10%
10.B.4.	Capacity for innovation in public health	30%
10.B.5.	Maintenance of scientific and ethical standards in research	50%
10.C.	Coordination of research activities	
10.C.1.	Research coordination	40%
10.D.	Dissemination and knowledge-brokering	
10.D.1.	Mechanisms and structures to disseminate research findings to public health colleagues	30%
10.D.2.	Mechanisms to translate evidence into policy and practice	40%
10.D.3.	Effectiveness of policy-makers in communicating their needs to the research community, including health technology firms	50%

Key recommendations

- Improve existing and develop new financing mechanisms for public health research (10.A.1).
- **Priority recommendation (low effort–high impact):** Review the mandate and title of the SPCPM and reorganize it into the Scientific Research Institute on Public Health to cover the full range of modern public health services (10.A.4)
- Amend regulatory legislative acts such that research institutions in the field of public health obtain information free of charge from the institutional databases continuing information on health and environmental status (10.B.1).
- Strengthen dialogue with other sectors for decision-making on the use of research in public health policy-making and practice (10.D.2).

STRENGTHS, WEAKNESSES AND AREAS FOR IMPROVEMENT

10.A. Setting a national research agenda

Strengths: The country has research organizations conducting public health research.

Weaknesses: There is no single strategy for scientific research in the field of public health, and no clear criteria for setting priorities. There is a lack of governmental funding for public health research, and a lack of serious investments in research. Most research is conducted for pilot projects that are poorly implemented into practice.

Areas for improvement: G; F; RG; SD

10.B. Capacity-building

Strengths: There are human resources committed to the development of modern technologies and programmes for monitoring population health, as well as scientific and research alliances that can serve as opportunities for training and development.

Weaknesses: Researchers lack free access to the databases of organizations collecting information, as well as information in digital format and on electronic media. This is especially true of data broken down by classes of diseases and causes of death and disaggregated by, for example, urban/rural residence, age and sex. Researchers must spend significant amounts of time and personal resources obtaining access to archives and copying data onto paper for analysis. There is also a shortage of young staff and a loss of young researchers due to low motivation (caused by low wages, a lack of modern equipment and a lack of opportunities for publishing articles).

Areas for improvement: G; F; RG; SD

Annex 1. List of priority recommendations

1.	1.B.15	Strengthen intersectoral action and develop an intersectoral strategy to address antimicrobial resistance.	Ongoing	Ministry of Health (MoH); Ministry of Agriculture and Melioration; Ministry of Finance; Department of Disease Prevention and State Sanitary and Epidemiological Surveillance (DDPSES); Department of Medicines and Medical Techniques; Republican Centre for Immunoprophylaxis (RCI); Scientific and Production Centre for Preventive Medicine (SPCPM); State Inspectorate for Veterinary and Phytosanitary Security
2.	2.A.1	Develop capacity to assess emergency risk using new technologies such as geographic information systems to map sources of acute and dangerous infections and to rank them.	2017–2018	MoH; Republican Centre for Quarantine and Especially Dangerous Infections
3.	4.B.10	Provide regular public education on healthy lifestyles through the country's village health committees.	2017, 2019, 2021 (once every 3 years)	Republican Centre of Health Promotion (RCHP)
4.	5.A.1	Develop a national immunization programme with an action plan and budget for 2018–2022.	2017–2019	MoH; DDPSES; RCI
5.	6.B.4	Develop a national strategy and relevant legislation for improving public health services.	2016–2018	MoH; Public Health Office (PHO)

	EPHO	Activity	Timeline	Responsible organizations
6.	7.B.1	Develop regulations to strengthen the responsibilities of postgraduates and employers to attract public health specialists at the level of primary health care.	2017–2018	MoH; PHO; Kyrgyz State Medical Academy (KSMA); Ministry of Education and Sciences; public health service organizations
7.	7.B.3.	Develop qualification requirements for public health professionals, as well as workload norms.	2016–2018	MoH; Ministry of Education and Sciences; KSMA; public health service organizations
8.	8.B.1.	Under the public health services strategy, develop a mechanism for reinvesting saved funds into the public health system.	2017–2018	MoH; PHO; public health service organizations
9.	9.A.1.	Develop guidelines on communication for the public health service, including for risk management.	2017–2018	MoH; RCHP
10.	10.A.4.	Review the mandate and the title of the SPCPM and reorganize it into the Scientific Research Institute on Public Health to cover the entire range of public health operations.	2017–2018	MoH; PHO; Ministry of Education and Sciences; SPCPM

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.

Member States

Albania
Andorra
Armenia
Austria
Azerbaijan
Belarus
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
Cyprus
Czechia
Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Luxembourg
Malta
Monaco
Montenegro
Netherlands
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
The former Yugoslav
Republic of Macedonia
Turkey
Turkmenistan
Ukraine
United Kingdom
Uzbekistan

World Health Organization Regional Office for Europe
UN City, Marmorvej 51, DK-2100 Copenhagen Ø, Denmark
Tel.: +45 45 33 70 00 Fax: +45 45 33 70 01
E-mail: contact@euro.who.int