JOINT EXTERNAL EVALUATION OF IHR CORE CAPACITIES

of the
KYRGYZ REPUBLIC

Mission report:
28 November–2 December 2016

World Health Organization

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ACKNOWLEDGEMENTS

Abbreviations

AMR	antimicrobial resistance
BCG	bacille Calmette-Guérin (vaccine against tuberculosis)
CDC	United States Centers for Disease Control and Prevention
CIS	Commonwealth of Independent States
DHS	Demographic and Health Survey
EAEU	Eurasian Economic Union
EOC	emergency operations centre
FAO	Food and Agriculture Organization of the United Nations
FETP	field epidemiology training programme
Gavi	The Gavi Alliance, formerly known as the Global Alliance for Vaccines and Immunization
HACCP	hazard analysis and critical control points
HCAI	health care-associated infection(s)
HIV	human immunodeficiency virus
HR	human resources
IAEA	International Atomic Energy Agency
IHR	International Health Regulations (WHO, 2005)
INFOSAN	International Food Safety Authorities Network
ISO	International Organization for Standardization
JEE	Joint external evaluation
MICS	multiple indicator cluster survey
MMR	measles, mumps and rubella (vaccine)
NFP	national focal point
NGO	nongovernmental organization
OIE	World Organisation for Animal Health
PHEIC	public health emergency of international concern
PoE	points of entry
PVS	performance of veterinary services
SARS	severe acute respiratory syndrome
SOP	standard operating procedure
SWAP	sector-wide Aapproach
WHO	World Health Organization

Executive Summary

The JEE process in Kyrgyzstan

JEE is one of the four components of WHO's new monitoring and evaluation framework for the International Health Regulations (IHR) (2005). Used together, the four components of the monitoring and evaluation framework make it possible to assess a country's IHR capacity. Two of the components – the self-administered annual reporting tool and the JEE – are used to evaluate the legislative and regulatory framework, infrastructure and mechanisms the country has in place. The two other components (after action reports from exercises or emergency responses) enable assessment of a country's practical capacity. The focus of the JEE in the Kyrgyz Republic was solely to establish the existence of the national capacities, structures and mechanisms relevant to IHR, not to evaluate their quality or how well they function.

A JEE is always voluntary, and is undertaken at the request of the country. The request from Kyrgyzstan was received by WHO on 10 October 2016. The mission took place in Bishkek from 28 November to 2 December 2016, with the involvement of an external team of technical experts appointed by national governments, technical institutes and United Nations agencies. During plenary sessions and field site visits, representatives of the Kyrgyz Ministry of Health and other relevant ministries and departments from a variety of sectors (including the national IHR focal point) presented information about the country on IHR-relevant capacity in the 19 technical areas of the JEE tool. The indicators described in the JEE tool were then jointly evaluated by the national participants and external team. The scores given and the priority actions identified were agreed by the whole JEE team, with the involvement of national and external experts (see Annex 1 for a list of members of the external JEE team and the national institutions of Kyrgyzstan that participated). As a result of this joint process, recommendations were developed for priority actions that took account of the national structures, institutions and programmes in place, including the Den Sooluk National Health Reform Programme, on the basis of a sector-wide approach (SWAP). This report includes the summarized joint conclusions and recommendations for priority actions, and also indicates strengths and weaknesses.

In terms of the next steps in building Kyrgyzstan's IHR core capacities, a multisectoral national plan will be developed that will provide clear directions and a budget for addressing the gaps in IHR core capacity identified through the JEE and the other components of the IHR monitoring and evaluation framework, as well as the gaps identified on the basis of related evaluations and other national information. In Kyrgyzstan, the results of these evaluations will provide useful information for the development of the next national strategy for the health sector in 2017, especially from the point of view of providing sustainable national funding, strengthening health systems and building the capacity required for comprehensive cooperation within the IHR framework.

Key findings of the JEE mission in Kyrgyzstan

Kyrgyzstan has high quality public health service provision. It has a robust public health infrastructure and institutions, with a sound legal basis. The Ministry of Emergencies has structures in place for a multi-sectoral response to emergencies at the national, regional and district levels, and there is also an Interdepartmental Committee on Civil Protection, headed by the Prime Minister, that manages emergencies. Kyrgyzstan's admission to the Eurasian Economic Union (EAEU) in 2015 has already.reaped benefits and has facilitated compliance with the high standards of the EAEU. There is a lot of work to be done in the coming years on harmonization with the EAEU, which will benefit the Kyrgyz economy and the health of the Kyrgyz people.

The most important issue identified during the JEE is the lack of a whole-of-government, all-hazards approach to national IHR implementation and the relative ineffectiveness of the national IHR focal point (NFP) outside the health sector. The Department for Disease Control and National Health and Epidemiological

Surveillance, headed by Dr Tolo Isakov, has been named as the NFP, and the Kyrgyz Ministry of Health has approved a decision outlining the role of the NFP. However, following referral to the national government level, the decision was returned to the Ministry of Health without having been approved. The reason for this was that the changes proposed in the decision should fall within the responsibilities of the Ministry of Health and not extend to government level. Although the Government does have some multi-sector coordinating committees responsible for national policy on health and emergencies, and the Ministry of Health is represented in many of these, none of these committees was appointed a coordinating body for IHR. In any country, health-related emergencies (such as the Ebola outbreak or a radiation emergency) do not just affect areas directly connected with health (such as public health, animal health, food, environment), but also significantly affect the security of the entire country, including non-health sectors such as policing and military issues, trade, tourism, transport and the economy. That is why a whole-of-government approach is needed in planning and ensuring preparedness, identification, and response to routine and emergency health situations. In Kyrgyzstan, understanding of IHR obligations in non-health sectors needs to be improved, and responsibility for IHR implementation should be assumed at a higher level of government so as to ensure better health security and national security generally.

The second important issue identified during the JEE mission relates to the fragmented distribution of roles and responsibilities between the various sectors in the context of IHR implementation. There is a proliferation of inspectorates, centres, agencies and departments under various ministries and at various levels (central, regional and district) responsible for various aspects of IHR implementation. These bodies often have their own norms, policies and plans regulating their activities, leading to potential confusion regarding actual roles and responsibilities, including a potential for gaps and duplication of work. Crosscutting measures and intersectoral links have been established and are generally effective in emergencies when the Ministry for Emergencies and the Interdepartmental Committee on Civil Protection are working together. However, there are several other committees for various types of activities and measures, and in some circumstances the overlapping mandates of these committees may duplicate each other. Programmes are generally vertical in nature, but there is no culture of sharing information and dividing up responsibilities, although some mechanisms have been created for links, coordination and cooperation (for example, using the One Health approach) for routine work. The creation of a multisectoral technical committee for planning and implementation of routine work (such as epidemiological surveillance, detection and risk assessment) would have great significance for current and future zoonotic events and other issues relating to human health, animal health and the environment.

The third fundamental problem identified in the course of the JEE concerns the availability of human resources and the quality of specialist training in all areas of health, such as epidemiology, laboratory diagnosis, chemical and nuclear/radiation safety, and providing medical assistance. This is the result of a high turnover of staff, particularly highly qualified staff, along with a low level of pay, difficulties in recruiting younger staff, and the retirement of existing staff. The Kyrgyz participants in the JEE process identified as key priorities not just training and support generally, but also the quality and consistency across the country of specialist knowledge in the public health system and boosting the overall volume and quality of training. It was also noted that the success of these programmes can only be guaranteed when the public health system is able to retain qualified, trained and experienced staff, including in remote regions, through appropriate pay and working conditions and the use of other incentives.

The above problems, which relate to the fragmentation of the health system and inadequate human resources, are a result of the country's efforts to support a health system that is historically complex, both financially and technically. The health care reforms implemented since independence in 1991 have principally focused on improving clinical outcomes for disease and optimizing the operational aspects of the health system (for example, maintaining health funding at 13% of the national budget), and on ensuring national coverage of essential health services. However, global systemic issues, such as the problem of weak links with other sectors, have not been addressed effectively. Optimization of health systems to

precisely determine the country's current needs and real capacities will be of key importance in ensuring practical and economic effectiveness, in particular for the potential freeing up of financial resources that could be used to resolve the problems of staff shortages and turnover.

In order to increase the effectiveness of the health system, the national Government needs to take over responsibility for funding its core functions, in the interests of ensuring stability. The implementation of national programmes and strategies is coordinated by national bodies, but certain categories of health workers and types of public health activities, including national measures affecting IHR capacity, are currently financed, mainly or exclusively, from external donor funding, sometimes with a small contribution from the national budget. External financial and technical assistance for public health from various national and international donors will continue, as will support for emergency planning from the United Nations agencies including WHO, the Office of the United Nations Resident Coordinator and the United Nations Office for the Coordination of Humanitarian Affairs. However, following Kyrgyzstan's change of status in 2014 (reclassification from low-income to lower-middle-income country), external financing has begun to taper off, and consequently national planning measures are urgently needed to ensure domestic sustainability.

Caveats and next steps

As explained above, the JEE does not attempt to assess how well the national system performs, as this will be done using the IHR monitoring and evaluation framework through the activities and measures implemented on the basis of the outcomes of this review. According to the outcome of the JEE, Kyrgyzstan has established basic infrastructure and prerequisites as provided for in legislation and regulations, which explains the high JEE scores for many indicators. However, it should be noted that the country's true operational capacity cannot really be determined until the plans and mechanisms – including the emergency plans – have been tested regularly, the lessons learnt taken into account, and the results of the exercises published.

On the last day of the mission Dr Oleg Gorin, deputy Minister of Health and Chief Medical Officer of Kyrgyzstan, participated in a short briefing with national experts, the external JEE team and the WHO Representative in Kyrgyzstan. The mission was reviewed, the final results were presented, and the next steps were discussed. It was emphasized that the Ministry of Health, with support from WHO and other international and regional partners, is aspiring to develop national capacity for IHR implementation and to integrate IHR into the national system using a whole-of-government approach, after establishing the primary responsibility of the national government for enhancing national security. Support is needed for these and subsequent steps at the highest level of government, in the context of human and national security – and not just in the field of health.

Kyrgyzstan scores

Technical area	Indicators	Score
National legislation, policy and financing	P.1.1 Legislation, laws, regulations, administrative requirements, policies or other government instruments in place are sufficient for implementation of IHR (2005)	3
	P.1.2 The State can demonstrate that it has adjusted and aligned its domestic legislation, policies and administrative arrangements to enable compliance with the IHR (2005)	3
IHR coordination, communication and advocacy	P.2.1 A functional mechanism is established for the coordination and integration of relevant sectors in the implementation of IHR (2005)	3
Antimicrobial resistance	P.3.1 Antimicrobial resistance (AMR) detection	1
	P.3.2 Surveillance of infections caused by AMR pathogens	1
	P.3.3 Health care-associated infection (HCAI) prevention and control programmes	4
	P.3.4 Antimicrobial stewardship activities	1
Zoonotic diseases	P.4.1 Surveillance systems in place for priority zoonotic diseases/pathogens	4
	P.4.2 Veterinary or animal health workforce	4
	P.4.3 Mechanisms for responding to zoonoses and potential zoonoses are established and functional	3
Food safety	P.5.1 Mechanisms are established and functioning for detecting and responding to foodborne disease and food contamination	4
Biosafety and biosecurity	P.6.1 Whole-of-government biosafety and biosecurity system is in place for human, animal, and agriculture facilities	3
	P.6.2 Biosafety and biosecurity training and practices	3
Immunization	P.7.1 Vaccine coverage (measles) as part of national programme	4
	P.7.2 National vaccine access and delivery	4
National laboratory system	D.1.1 Laboratory testing for detection of priority diseases	4
	D.1.2 Specimen referral and transport system	4
	D.1.3 Effective modern point-of-care and laboratory-based diagnostics	4
	D.1.4 Laboratory quality system	3
Real-time surveillance	D.2.1 Indicator and event-based surveillance systems	4
	D.2.2 Interoperable, interconnected, electronic real-time reporting system	4
	D.2.3 Analysis of surveillance data	5
	D.2.4 Syndromic surveillance systems	4
Reporting	D.3.1 System for efficient reporting to WHO, FAO and OIE	3
	D.3.2 Reporting network and protocols in country	3
Workforce development	D.4.1 Human resources are available to implement IHR core capacity requirements	4
	D.4.2 Field epidemiology training programme or other applied epidemiology training programme in place	4
	D.4.3 Workforce strategy	3

Preparedness	R.1.1 Multi-hazard national public health emergency preparedness and response plan is developed and implemented	4
	R.1.2 Priority public health risks and resources are mapped and utilized	4
Emergency response operations	R.2.1 Capacity to activate emergency operations	5
	R.2.2 Emergency operations centre operating procedures and plans	5
	R.2.3 Emergency operations programme	5
	R.2.4 Case management procedures are implemented for IHR relevant hazards	5
Linking public health and security authorities	R.3.1 Public health and security authorities, (e.g. law enforcement, border control, customs) are linked during a suspect or confirmed biological event	4
Medical countermeasures and personnel deployment	R.4.1 System is in place for sending and receiving medical countermeasures during a public health emergency	5
	R.4.2 System is in place for sending and receiving health personnel during a public health emergency	2
Risk communication	R.5.1 Risk communication systems (such as plans, mechanisms, etc.)	4
	R.5.2 Internal and partner communication and coordination	4
	R.5.3 Public communication	4
	R.5.4 Communication engagement with affected communities	4
	R.5.5 Dynamic listening and rumour management	5
Points of entry	PoE.1 Routine capacities are established at points of entry	4
	PoE.2 Effective public health response at points of entry	3
Chemical events	CE.1 Mechanisms are established and functioning for detecting and responding to chemical events or emergencies	5
	CE.2 Enabling environment is in place for management of chemical events	5
Radiation emergencies	RE.1 Mechanisms are established and functioning for detecting and responding to radiological and nuclear emergencies	5
	RE.2 Enabling environment in place for management of radiation emergencies	5

PREVENT

National legislation, policy and financing

Introduction

The IHR (2005) establish obligations on and rights for States Parties. In some States Parties, implementation of the IHR may require new or modified legislation. Even where new or revised legislation is not specifically required, States may still choose to revise some legislation, regulations or other instruments in order to facilitate more effective IHR implementation. The introduction of legislation can help to institutionalize and strengthen the role of IHR and operations within the State Party. It can also facilitate coordination among the various entities involved in IHR implementation (see detailed guidance on IHR (2005) implementation in national legislation at: http://www.who.int/ihr/legal_issues/legislation/en/index.html). In addition, it is also important for States Parties to have policies determining national structures and responsibilities and for adequate financial resources to be allocated.

Target

States Parties should have an adequate legal framework to support and enable the implementation of all of their obligations and rights to comply with and implement the IHR (2005). In some States Parties, implementation of the IHR (2005) may require new or modified legislation. Even where new or revised legislation may not be specifically required under the State Party's legal system, States may still choose to revise some legislation, regulations or other instruments in order to facilitate their implementation and maintenance in a more efficient, effective or beneficial manner. States Parties to ensure provision of adequate funding for IHR (2005) implementation through national budget or other mechanism.

Kyrgyzstan level of capabilities

Kyrgyzstan has an extensive, wide-ranging national legislative framework at various levels of the legal hierarchy, which includes a large number of regulatory instruments in the field of public health, such as laws on public health, radiation/nuclear safety and chemical security, food safety, water safety, in addition to a series of government decrees and more than 40 orders by the Kyrgyz Ministry of Health on various aspects of public health. A biosafety code is under development.

In addition, there is also legislation at the level of the EAEU, of which Kyrgyzstan became a member in August 2015, alongside the other Member States: Armenia, Belarus, Kazakhstan and the Russian Federation. The relevant EAEU legislation largely concerns the prevention and treatment of communicable diseases, with an emphasis on detection and response, but also covers transboundary public health threats and information sharing. The EAEU legislation also includes an agreement on controlling communicable diseases.

National legislation on public health was reviewed in 2012 to assess compliance with the IHR. One of the key conclusions of that review was that there was a lack of national legislation to support coherent implementation of IHR (apart from various specific provisions of the IHR, which are covered by particular legislative provisions). Another important conclusion was that the mandate of the NFP for IHR was not adequately supported for compliance with a whole-of-government, all-hazards approach to IHR. A process to amend the roles and responsibilities of the NFP was therefore initiated, so as to enable the NFP to fulfil the appropriate IHR responsibilities. Work also began on a five-year action plan to support efforts to develop national IHR capacity. This process is currently being conducted in conjunction with government legal experts.

A significant weakness in relation to IHR implementation from the standpoint of national legislation is that the process is confined almost entirely to the health sector, and partly to the animal health sector. There was no convincing evidence to suggest that the legislation applies to non-health sectors concerned with the provisions of the IHR.

The legislation was reviewed and amended after accession to the EAEU, in accordance with the requirements of that organization. The team was told that the EAEU's technical standards are aligned with IHR requirements.

Overall State funding for IHR was not reviewed. Individual aspects of IHR, such as control of communicable diseases, epidemiological surveillance, laboratory services, human resources, points of entry, and preparedness are ensured through externally funded programme measures or resources from other donors, such as the Russian Federation, under an agreement between the Kyrgyz Government and the Government of the Russian Federation to provide technical assistance to Kyrgyzstan in the process of its EAEU accession.

Recommendations for priority actions

- Complete the legislative process to strengthen the NFP's capacity to fulfil its functions in accordance with an all-hazards, whole-of-government, multidisciplinary approach and improve the coverage of non-health sectors.

- Finalize the awaited approval of a government decree on implementation of the IHR that requires all relevant national sectors, in addition to the health sector, to proactively implement IHR at the national level, and also to complete development of the five-year action plan on IHR implementation.

- Review the relevant national legislation, standard operating procedures (SOPs) and reporting protocols in the non-health sectors involved in IHR implementation (e.g. border control, transport, chemical safety, food safety, animal health protection and environmental protection) to ensure IHR obligations are fulfilled and that the NFP is integrated into intersectoral information-sharing and communication.

- Analyse EAEU legislative requirements and standards to assess conformity with IHR.

Indicators and scores

P.1.1 Legislation, laws, regulations, administrative requirements, policies or other government instruments in place are sufficient for implementation of IHR (2005) – Score 3

An evaluation was carried out of legislation, regulations, administrative requirements and other government instruments relating to IHR implementation. Kyrgyzstan has implemented some of the recommendations made as a result of this evaluation. However, there is still no legislation enabling the NFP to operate on a multisectoral basis, despite efforts by the Ministry of Health to resolve the problem.

Strengths/best practices

- Kyrgyzstan has a broad-reaching legislative framework that has been reviewed twice - once in 2012 to assess conformity with IHR, and then again to assess conformity with EAEU standards, which are in accordance with IHR.

- The Ministry of Health has begun developing legislation to:

  a) strengthen the role of the NFP in accordance with an all-hazard, whole-of-government approach that extends to non-health sectors involved in IHR implementation;

  b) ensure more active involvement of non-health sectors involved in IHR implementation; and c) introduce IHR as obligations that must be fulfilled by the whole of government, not just the health sector.

- Work has been done recently to revise national legislation and standards to bring them into line with EAEU requirements intended to prevent and combat threats to human health.

- Transboundary agreements have been signed on cooperation between the Member States of the EAEU, primarily regarding the response to public health emergencies. EAEU Member States share information and provide mutual assistance when a country is responding to an emergency.

Areas that need strengthening/challenges

- There is no national legislation requiring the various national non-health sectors to observe the requirements established in the IHR and participate in their implementation.

- There is no legislative basis to enable the NFP to fulfil all of his or her functions in accordance with an all-hazard, whole-of-government approach.

P.1.2 The State can demonstrate that it has adjusted and aligned its domestic legislation, policies and administrative arrangements to enable compliance with the IHR (2005) – Score 3

An evaluation of the relevant legislation, policies, administrative arrangements and other government instruments was conducted to assess their compliance with IHR, and showed that modifications were needed. This legislation is applied in various sectors – in some sectors more fully than in others.

Strengths/best practices

- National legislation was reviewed in 2012 to assess its compliance with IHR, and recommendations were made for the necessary amendments, in particular with regard to establishing a multisectoral mandate for the NFP on IHR and IHR obligations for non-health sectors. WHO helped to develop the recommendation to amend the domestic legislation in question.

Areas that need strengthening/challenges

- The scope of the legislative review was limited to the health sector and did not extend to non-health sectors involved with IHR implementation.

- It remains unclear which provisions of the IHR are reflected in the legislation of non-health sectors (no evidence of legislation in non-health sectors).

- The functions of the NFP on IHR have not been strengthened in relation to non-health sectors, and so the NFP does not have powers to ask them for information or take appropriate action. Neither is the NFP authorized to receive operational information from non-health sectors.

- There is no evidence of coordination or concordance of the regulatory and legal bases of the various sectors involved in IHR implementation.

IHR coordination, communication and advocacy

Introduction

Effective implementation of IHR requires a multisectoral/multidisciplinary approach on the basis of national partnership relationships to create effective systems of alert and response. The coordination of nationwide resources, including the designation of an NFP for the IHR with their own national centre of IHR connections, is an important condition for IHR implementation.

Target

To adopt an intersectoral/multidisciplinary approach with the participation of national partners that will make it possible to create a stable alert and response system for effective IHR implementation. The coordination of nationwide resources, including sustainable funding of national coordination on IHR as a national centre of IHR links accessible at any time, is a key condition for IHR implementation. State representatives will provide WHO with the relevant contact information for the IHR national coordinating centre, and will continually update this information and confirm it on an annual basis.

Kyrgyzstan level of capabilities

There is clearly structured multisectoral coordination of IHR implementation in Kyrgyzstan when responding to emergencies at the national level. In an emergency, coordination between the various sectors is ensured through the Interdepartmental Civil Protection Committee under the leadership of the Prime Minister, which is convened by the Ministry of Emergencies. In an emergency, coordination between the various sectors is implemented in accordance with a special law on emergencies (No. 01,1/12715). A national emergency committee on epidemic prevention, chaired by a representative of the Prime Minister and convened by the Ministry of Health, coordinates multisectoral measures for surveillance and response to public health emergencies. In support of the national emergency committee, temporary working groups are established with specific tasks, depending on the scale of the emergency. The national emergency committee on epidemic prevention is established with a similar composition at every territorial level of the country (regional and district), chaired by the governor or mayor, with representatives of the various sectors participating in the response to emergencies, to resolve issues at the district/regional level in the event of an emergency. Procedures are in place so that the alert is passed on to the national level, and control over response measures is taken from there, even if the emergency occurs at regional or district level. There is corresponding leadership on cooperation between the institutions involved in emergency response and risk education.

There seems to be an adequate legislative basis for coordinated emergency response, which includes government orders and strategic plans in conjunction with concrete prevention plans, but also policies on cooperation between the public health sector and the veterinary and agricultural sectors.

Intersectoral connections and information exchange in the event of an emergency are structured horizontally and vertically: horizontally between the sectors represented at the district or regional level, and vertically within an individual sector, from the district level to the regional level, and even as far as the national level. For example, during an outbreak of zoonotic disease, information is sent by the veterinary service at the relevant territorial level (district or regional) to the public health sector (represented at the territorial unit of the State sanitary-epidemiological service). If an investigation of the outbreak is needed, this is conducted jointly; in this case, the relevant measures are coordinated by the emergency epidemic prevention committee at the appropriate level. National level surveillance is conducted by the Department for Disease Control and National Health and Epidemiological Surveillance (the Epidemiological Surveillance Department) within the Ministry of Health.

Emergency response coordination is tested in annual exercises organized by the Ministry of Health for representatives of all the relevant ministries, departments and agencies. However, it remains unclear how existing procedures are then reviewed as a result of the lessons learnt.

Although multisectoral IHR coordination is well structured for emergency response, it is less apparent in the absence of an emergency. The NFP for IHR is not currently legally mandated to fulfil a multi-disciplinary role, as the responsibilities of the NFP are largely limited to the public health sector, including chemical and radiation/nuclear events, which partly relate to the mandate of the Ministry of Health, with separate information exchange functions linked with the animal health protection sector (mainly in relation to livestock and, to a lesser extent, wildlife). The Ministry of Health has initiated a series of draft laws designed to strengthen the functioning of the NFP in terms of multisectoral coordination and connections, and has also developed an IHR policy requiring all national sectors to cooperate on IHR issues; however, these have not yet been adopted at government level.

Multisectoral IHR coordination and links also prevent a low level of information about IHR in non-health sectors. There is almost no day-to-day coordination and communication due to inadequate support from the higher political echelons, and to the weak legal mandate of the NFP on IHR.

Recommendations for priority actions

- Strengthen day-to-day IHR coordination and intersectoral links during peace time.

- Give the NFP on IHR the potential to fulfil the necessary coordination functions, as well as to act as a national IHR information hub.

- Ensure the national non-health sectors are adequately trained in IHR procedures and the appropriate roles and responsibilities within the context of IHR.

Indicators and scores

P.2.1 A functional mechanism is established for the coordination and integration of relevant sectors in the implementation of IHR – Score 3

There are mechanisms, including SOPs, in place for cooperation between the appropriate ministries in support of IHR implementation. An Interdepartmental Committee on Civil Protection, headed by the Prime Minister, and convened by the Ministry for Emergencies, serves as the coordinating body during the responses to emergencies of national and international significance.

Strengths/best practices

- A well established system of interdepartmental coordination and links for emergency response, with clear procedures, protocols and matrices for alert and coordination between bodies (both for health-related emergencies and other kinds of emergencies).

- There is an anti-epidemic and anti-epizootic commission for multisectoral coordination of aid at three levels of the system (national, regional and district).

- Coordination between the various sectors in emergency and crisis situations is regulated by appropriate legislation (governmental decrees).

- There is established cooperation between the various national sectors during emergencies, which has been tested during real events.

Areas that need strengthening/challenges

- There is a lack of appropriate legislation and normative mechanisms to support regular coordination and communication between the ministries, responsible departments and institutions involved in the implementation of IHR in peace time.

- There is no mechanism for the adoption of multisectoral strategic decisions. For example, there are no regular meetings of the various ministries, responsible departments and institutions to discuss the progress of IHR implementation in the country and the action needed.

- The NFP on IHR does not have sufficient powers to receive day-to-day information about all the events going on in the country that, although not emergencies, may be significant for public health and for IHR implementation.

- Non-health related sectors, as well as some of the institutions within the Ministry of Health, are not adequately informed about IHR procedures and about their own roles and responsibilities in relation to the IHR.

PREVENT

Antimicrobial resistance

Introduction

Bacteria and other microbes evolve in response to their environment and inevitably develop mechanisms to resist antimicrobial agents. For many decades, the problem was manageable as the growth of resistance was slow and the pharmaceutical industry continued to create new antibiotics.

Over the past decade, however, this problem has become a crisis. Antimicrobial resistance (AMR) is developing at an alarming rate, outpacing the development of new countermeasures capable of eliminating infections in humans. This situation threatens patient care, economic growth, public health, agriculture, economic security, and national security.

Target

Support work coordinated by FAO, OIE and WHO to develop an integrated global package of activities to combat antimicrobial resistance, spanning human, animal, agricultural, food and environmental aspects (i.e. a One Health approach). Each country has: (i) its own national comprehensive plan to combat antimicrobial resistance; (ii) strengthened surveillance and laboratory capacity at the national and international levels following international standards developed as per the framework of the Global Action Plan; and (iii) improved conservation of existing treatments and collaboration to support the sustainable development of new antibiotics, alternative treatments, preventive measures and rapid point-of-care diagnostics, including systems to preserve new antibiotics.

Kyrgyzstan level of capabilities

To date, Kyrgyzstan's laboratory network has taken almost no measures to research AMR or provide information about this topic, except for some work in the context of a vertical tuberculosis programme. International efforts to raise awareness of AMR have been successful in Kyrgyzstan, and the country is gradually starting to carry out all the relevant measures.

According to the country presentation, Kyrgyzstan has established a procedure to promote the detection of AMR in accordance with European human health standards. AMR is not currently detected in domestic animals.

Antibiotics are freely available to the population; they are dispensed without a prescription. There is no prohibition on the use of antimicrobial preparations to stimulate growth in animals; there are controls on the use of antibiotics, but these are restricted to ensuring their rational use.

Kyrgyzstan does not yet have a national plan that provides for the detection, recording, epidemiological surveillance and response to AMR; an interdepartmental working group is being formed to develop such a plan.

Recommendations for priority actions

- In cooperation with all the relevant sectors, develop a draft multisectoral national action plan based on the Global Action Plan on Antimicrobial Resistance, covering detection, information sharing, AMR epidemiological surveillance, and controls on antibiotic use.
- Train laboratory employees and infection control staff, nurses, physicians and epidemiologists.
- Designate a national reference laboratory for AMR, focusing on the human and animal health sectors.

Indicators and scores

P.3.1 Antimicrobial resistance (AMR) detection – Score 1

This score reflects the fact that Kyrgyzstan does not have a national multisectoral plan for AMR surveillance, although it does have the capability to detect AMR and report on certain priority microorganisms that are human or animal pathogens.

Strengths/best practices

- A vertical tuberculosis programme that monitors AMR.

- Human and animal health protection sectors have begun to cooperate in the context of a multisectoral approach.

- Situation analysis and training for the development of a multisectoral national action plan on AMR have taken place with WHO support.

Areas that need strengthening and challenges

- There is no national plan for AMR detection and reporting.

- Development of training for staff in AMR detection techniques and subsequent reporting.

- No designated national laboratory with responsibility for AMR in the context of human pathogens.

P.3.2 Surveillance of infections caused by AMR pathogens – Score 1

As above, this score reflects the fact that Kyrgyzstan does not have a national multisectoral plan for epidemiological surveillance of AMR.

Strengths/best practices

- A national centre for veterinary diagnostics and expertise (the Central Veterinary Laboratory) has capacity for AMR detection and testing of antimicrobial susceptibility in clinical isolates. Passive epidemiological surveillance is conducted on the basis of reported data.

- A vertical tuberculosis programme conducts epidemiological AMR surveillance.

Areas that need strengthening/challenges

- There is no national AMR surveillance plan.

- Insufficient attention is paid to the training of all staff involved in AMR surveillance.

P.3.3 Health care-associated infection (HCAI) prevention and control programmes – Score 4

The country has a national plan for prevention and control of HCAI. A national strategy was introduced in 2005 and is in the third phase of its implementation.

Strengths/best practices

- A national strategy has been in operation since 2005 and is subject to review and continuous improvement.

- A decree on infection control has been approved.

- There is a committee on quality responsible for infection control monitoring.

Areas that need strengthening/challenges

- There has been no evaluation of the progress made since 2005 neither to identify opportunities for improvement.

P.3.4 Antimicrobial stewardship activities - Score 1

This score reflects the fact that Kyrgyzstan does not have a multisectoral national plan on the rational use of antibiotics.

Strengths/best practices

- Infection control programmes include ensuring the rational use of antibiotics prescribed by a physician in clinical circumstances such as surgery, neonatology and urgent care.

Areas that need strengthening/challenges

- There is no national plan controlling the use of antibiotics.

- There has been no evaluation of the use of antibiotics in medical institutions and veterinary services.

- Insufficient attention is paid to the training of all workers involved in ensuring rational antibiotic use.

Zoonotic diseases

Introduction

Zoonotic diseases are communicable diseases and microbes that spread between animals and humans. These diseases are caused by bacteria, viruses, parasites, and fungi. Approximately 75% of recently emerging communicable diseases affecting humans is of animal origin; approximately 60% of all human pathogens are zoonotic.

Target

Policies, practices and procedural standards are carried out that minimize the transmission of zoonotic diseases from animals to human populations.

Kyrgyzstan level of capabilities

The Government of the Kyrgyz Republic has a basis in the form of legislation and official policy, and also decrees, for combating zoonotic diseases, and it supports the use of a One Health approach, including the official strategic programmes "Manas Taalimi" for 2003–2008, "Den Sooluk" for 2009–2014, and the current programme, Health 2020. The need for prompt joint investigation of every case of infection as soon as urgent notification is received that zoonotic disease has been detected or is suspected is established in Government Decree No. 297 of 10 June 2011 on strengthening cooperation between ministries and departments in combating quarantinable and particular dangerous infections, and parasitic disease; Ministry of Health Order No. 610 of 26 November 2008 on improvements to the system for epidemiological surveillance of communicable and parasitic diseases in Kyrgyzstan; and Ministry of Health Order No. 524 from 2016.

There is an agreement in place between the relevant ministries and departments to extend the prevention measures that have been introduced, as well as a joint strategic plan on zoonotic diseases for 2012–2016, developed by the Ministry of Health and the Ministry of Agriculture, Food Industry and Melioration (Ministry of Agriculture).

Currently, epidemiological surveillance of the animal population is conducted by the State Inspectorate on Sanitary, Veterinary and Phytosanitary Security (the Veterinary Inspectorate) under the Government of Kyrgyzstan and the Department of Veterinary Control. The Republican Centre for Quarantinable and Especially Dangerous Infections is responsible for epidemiological surveillance of zoonotic infections in the human population. If a zoonotic public health event occurs, the Department for Disease Control and National Health and Epidemiological Surveillance (the Epidemiological Surveillance Department) the Kyrgyz Ministry of Health, the Veterinary Inspectorate and other institutions work effectively together, coordinated by the National Anti-epidemic and Anti-epizootic Emergency Commission.

The National Centre for Quarantine and Especially Dangerous Infections conducts model training exercises on localization and elimination of plague foci four times a year at a regional level, with the participation of all regional and local institutions. Post-event analysis is undertaken with the aim of identifying and remedying any gaps. The impact of these exercises was demonstrated in 2013 in multisectoral action taken in connection with a case of bubonic plague. Moreover, additional training was carried out in 2013 on issues relating to combating rabies.

A list of zoonotic infections of priority importance for public health was developed jointly by the public health and animal health protection sectors in accordance with Government Decree No. 583 of 23 September

2011. The list includes: rabies, anthrax, brucellosis, cystic and alveolar echinococcosis, and also plague. National strategies have been developed on the prevention and reduction of infections of these zoonoses. The list also includes foot-and-mouth disease, as this transboundary disease is of particular importance in veterinary medicine.

A five-year strategic plan has been adopted for the development of the veterinary service up to 2021, which sets out the priorities and basic conditions for improving veterinary services, including targets for improving animal health protection and disease control, ensuring the safety of food products and products of animal origin, veterinary control and supply of medicines. The goals are linked to the long-term missions of the service, and correspond to the recommendations made in an OIE report on the effectiveness of veterinary services from 2007 to 2016.

Recommendations for priority actions

- Create a programme for the continuous development of the capabilities of veterinarians and animal health protection specialists on issues of public health and veterinary services throughout the country, including the provision of additional training/retraining needed.

- Create a permanent system for joint planning and response to public health events related to zoonotic infections, which should involve the animal health, public health and environmental protection sectors. This should be overseen by a joint multisectoral rapid response team with the involvement of veterinary-epidemiological staff from the Ministry of Health's Disease Control and Epidemiological Surveillance Department, and from the Veterinary Inspectorate under the Kyrgyz Government.

- Develop and approve a strategic plan for veterinary services up to 2021.

- Develop and implement a plan for the recruitment and training of new veterinarians compliant with "Day One Competence" (the minimum required competence standard), which is intended to strengthen veterinary education in Kyrgyzstan.

- Modify the procurement policy so that the veterinary service and the Epidemiological Surveillance Department are able to acquire quickly the materials needed for disease prevention and control measures, for example, to allow them to purchase vaccines and equipment from a single supplier.

Indicators and scores

P.4.1 Surveillance systems in place for priority zoonotic diseases/pathogens – Score 4

This score is based on the strengths of the public health and animal health epidemiological surveillance system, and on the practice of conducting epidemiological surveillance for five jointly determined priority zoonoses.

Strengths/best practices

- A list of zoonotic infections of priority importance for public health has been developed jointly by the public health and animal health protection sectors; the list includes rabies, anthrax, brucellosis, cystic and alveolar echinococcosis, and plague.

- Epidemiological surveillance is conducted in the domestic animal population by the Veterinary Inspectorate and the Department of Veterinary Control, while surveillance of infectious diseases, including zoonoses, in the human population is conducted by the Epidemiological Surveillance Department. The veterinary epidemiological surveillance system is connected with the system for epidemiological surveillance of human disease, as evidenced by joint orders and memorandums. Medical and veterinary laboratories exchange reports monthly as well as in the event of a confirmed or suspected case of zoonoses, in accordance with the Government Decree No. 297 of 10 June 2011, on strengthening cooperation between ministries and departments in combating quarantine and

especially dangerous infections, and parasitic diseases.

- A cattle identification programme was introduced by the Veterinary Inspectorate In 2016, with support from the Russian Veterinary Federation and the World Bank. Livestock counting is good.

Areas that need strengthening/challenges

- There is no established procedure for sharing specimens between medical/public health and veterinary laboratories; coordination of this needs to be established and approved at the highest ministerial level.

- There is nopractice of cooperation between the State Agency for Environmental Protection and Forestry, which is responsible for the protection of wild animals, and the Epidemiological Surveillance Department or the Veterinary Inspectorate; the State Agency for Environmental Protection and Forestry does not conduct routine epidemiological surveillance of communicable disease in the wild animal population, which means that an outbreak of zoonotic infection, such as plague, could remain undetected until a case occurs in the human population.

P.4.2 Veterinary or animal health workforce – Score 4

The rationale for this score is the strong human resource capacity of public health care, veterinary services and animal health protection services, which operate in more than half the regions of the country; other factors that support the score given include the plan to strengthen staffing resources, and also the existence of epidemiological training in the form of study seminars and training in the field of epidemiology.

Strengths/best practices

- The country has 964 State and private veterinarians, including 290 laboratory workers.

- State Sanitary-Epidemiological Control, and the veterinary service (the Veterinary Inspectorate) have facilities in every district of the Republic.

- Private veterinary services are being developed: there are 2112 private veterinarians registered with the Veterinary Chamber (the register of private veterinarians), and the Veterinary Inspectorate is working with private vets to provide assistance in epidemiological surveillance and disease control programmes.

- It is planned to recruit 140 students for veterinary training with the aim of ensuring veterinary service provision in areas of the country where there are not currently enough veterinarians; training is conducted in Kyrgyz National Agrarian University, and there is also a Turkish international veterinary college.

- A positive impact on public health as a result of the strong veterinary staff capacity has been demonstrated: as a result of programmes to vaccinate cattle against Brucellosis, the number of cases of illness in people reportedly has reduced by more than two thirds over the last four years, while after two years of antiparasitic treatment of the dog population, the incidence of human echinoccosis has fallen by 16%.

- Training of public health specialists is conducted at the facilities of the Kyrgyz State Medical Institute for Professional Development Training, within the framework of approved curricula. Courses for the two-year field epidemiology training programme (FETP) are being conducted at the CDC training centre in the city of Almaty (two epidemiologists and one veterinarian are being trained).

Areas that need strengthening/challenges

- There is an ageing workforce in both the State and private sector.

- There is a need for retraining for private veterinarians.

P.4.3 Mechanisms for responding to zoonoses and potential zoonoses are established and functional – Score 3

This score is based on the cooperation that exists between the veterinary service and the health service for the purposes of sharing epidemiological surveillance information on zoonoses and of enabling a joint response to zoonotic events that have an implication for public health, as well as on the active implementation of the policy and the existence of a legislative basis to support such cooperation.

Strengths/best practices

- State Sanitary and Epidemiological Control, the Veterinary Service, and other institutions currently work together in the context of responding to specific zoonotic events with regard to public health; in emergencies, this cooperation is carried out under the leadership of the National Anti-epidemic and Anti-epizootic Commission, headed by the Prime Minister.

- Cooperation between the services is governed by legislation, as well by a memorandum between the Ministry of Health and the Ministry of Agriculture on prevention measures, including information sharing and the development of joint operational plans for responding to communicable disease. A joint strategic plan on zoonoses for 2012-2016 was developed.

- The Republican Centre for Quarantine and Especially Dangerous Infections conducts regional exercises four times a year on the eradication of an epidemic of plague or cholera; in 2013 the effectiveness of these exercises was put to the test in a multisectoral response to a case of bubonic plague. In addition, in 2013 the Veterinary Service, law enforcement agencies and local government authorities took part in an interdepartmental exercise on tackling rabies cases.

- Livestock owners are legally required (in article 29 of the Act on Veterinary Services) to report any occurrence of zoonotic infection and have civil and criminal responsibility for disclosing the fact of the occurrence or spread of especially dangerous diseases.

Areasthat need strengthening/challenges

- There is a policy on compensating owners for the loss of livestock in the interests of raising awareness about diseases; however, to date this has not been effected, as there is no fund from which compensation to victims can be paid.

- The procurement process for equipment and medical supplies, such as medicines or vaccines, to allow veterinary services to responsd to disease outbreaks is slow, due to the procurement procedures that are in place, requiring that calls for tender be issued and quotes received from multiple suppliers. For small orders and rapid acquisitions this can lead to delays in materials and equipment being received, or mean that they are not received at all.

- The National Wildlife Protection Agency does not conduct any epidemiological surveillance of animal disease; there is a lack of joint planning between the public health, animal health, and wildlife protection sectors.

- Monitoring and analysis is not conducted regularly and only in cases of human infection. However, a joint rapid response team, including representatives of the Ministry of Agriculture, the Ministry of Health, the Forestry Department and the Academy of Sciences, will be involved in the special response in the event of a suspected case of plague.

Food safety

Introduction

Food and waterborne diarrhoeal diseases are leading causes of illness and death, particularly in less developed countries. The rapid globalization of food production and trade has increased the potential likelihood of international incidents involving contaminated food. Identification of the source of an outbreak and its containment are critical for control. Risk management capacity must be developed with regard to control throughout the food chain continuum. If epidemiological analysis identifies food to be the source of an event, risk assessment and suitable risk management options need to be put in place to prevent human cases (or further cases).

Target

States Parties should have surveillance and response capacity for food and waterborne disease risk or events. This requires effective communication and collaboration between the sectors responsible for food safety, safe water and sanitation.

Kyrgyzstan level of capabilities

The Government of Kyrgyzstan has developed a strong corpus of laws and technical regulations governing the production, import, distribution and sale of food products, food ingredients and drinks, in order to guarantee their safety and health benefit, and is currently revising and making the necessary changes to these documents. These laws and regulations regulate hygiene, food product labelling and safety, and drinking water from the moment of manufacture through to their consumption, including their sale in catering establishments, and also include provisions on the enrichment of certain foodstuffs, such as flour and salt. These regulations and laws correspond to international standards and to the requirements of the EAEU, of which Kyrgyzstan became a member in 2015.

Responsibility for the safety of food products is shared between several ministries, institutions and departments, including the Ministry of Agriculture, Food Industry and Melioration (Ministry of Agriculture), the Epidemiological Surveillance Department, the Ministry of Health, the Veterinary Inspectorate, the Ministry of the Economy and others. The Ministry of Agriculture is responsible for the safety of food products and food security, managing four basic principles of food availability, accessibility, nutritional content and safety. The Ministry of Agriculture introduces legislation and regulations on the safety of food products and food security, and also coordinates action and data collection on the safety of food products from other collaborating ministries. The Ministry is also responsible for the coordination of correct food hygiene practices in Kyrgyzstan's food sector and is currently implementing and promoting the principles of hazard analysis and critical control points (HACCP) in the sector.

The Veterinary Inspectorate is responsible for the safety of domestic and imported food products. Its Department for Veterinary and Sanitary Security has responsibility for ensuring the safety of food products of animal and plant origin, for the investigation, testing and seizure of these products in the event of an outbreak of a foodborne disease, and also for the inspection of relevant agricultural and food businesses. The Epidemiological Surveillance Department monitors compliance with regulations on the safety of food products in Kyrgyzstan, exercises surveillance of compliance with rules on the transport, import and export of food products, which are subject to checks at border control/points of entry, conducts epidemiological surveillance and control of the activities of food manufacturing facilities, and undertakes the State registration of such facilities. In the event of an outbreak of a foodborne disease, the Epidemiological Surveillance Department carries out epidemiological investigation and testing of cases, as well as tracing of

infected individuals. During an outbreak, the Epidemiological Surveillance Department and the Veterinary Inspectorate carry out joint investigation and take response measures; joint responsibility is reaffirmed in a memorandum of understanding between the Epidemiological Surveillance Department and the Veterinary Inspectorate. These multisectoral activities are conducted in accordance with Order No. 33 of the Chief Medical Officer of the Kyrgyz Republic of 23 July 2003, and with the methodological guidelines: "Investigation of food poisoning cases".

Moreover, the Epidemiological Surveillance Department and the Veterinary Inspectorate conduct investigations and provide laboratory services at the regional, district and city levels across the whole country. In 2012, the Epidemiological Surveillance Department changed the principal focus of its activity from controlling food product safety to epidemiological surveillance, on the basis of risk analysis under the Government Decree No. 108 on the approval of risk assessment criteria when conducting business activities, (18 February 2012), and Decree No. 679 on the risk assessment criteria for use when conducting planned checks on business premises of high epidemiological risk (26 September 2011). The Epidemiological Surveillance Department provides laboratory services at the national level, comprising chemical and molecular investigation, parasitology and radiology services. At the regional level, bacteriological laboratory services are provided and there are 48 laboratories providing chemical laboratory services for the safety and determination of contamination of food products; however, only 15 of these have accreditation.

The Ministry of the Economy regulates and coordinates the licensing of food industry premises and ensures that imported goods that are subject to sanitary control comply with the requirements established by the EAEU; inspection and quarantine control of imported products is carried out in accordance with these requirements at seven border crossing points. The Centre for Standardization and Meteorology, under the Ministry of the Economy, is responsible for issuing certificates of compliance with the standards of the Kyrgyz Republic and the EAEU, which is required of all food premises to enable them to receive a license to operate. The Centre also ensures that all food premises within the borders of the EAEU meet the requirements and have a certificate of compliance in order to sell products on the territory of the Kyrgyz Republic, including safety analysis of products in an accredited laboratory.

In January 2016, an interdepartmental council on food safety issues was created with the aim of ensuring the safety of food products "from farm to fork". The Council, chaired by the first deputy prime minister and with the head of the Ministry of Agriculture as vice chair, comprises representatives of the Ministries of Finance, Economy, Health and Social Development, the Defence Council, the State Agency on Issues of Local Governance and Interethnic Relations, the Social Fund and the Veterinary Inspectorate. The Council applies an integrated approach to the safety of food products and manufacturing safety in the country, and is currently considering amendments to the legislation on ensuring the safety of food products, introduced by the Ministry of Agriculture in 2006.

Recommendations for priority actions

- Develop and carry out training and ensure the availability of study materials to increase awareness in the food industry and among the public of food product safety issues, and also on HACCP for the food industry.

- Strengthen laboratory capacity in all the laboratories of the Epidemiological Surveillance Department and the Veterinary Inspectorate involved in carrying out food product safety analysis so that they meet accreditation requirements.

- Set up a training centre for staff of the Epidemiological Surveillance Department, the Veterinary Inspectorate and the customs service for skills updating and refresher training on issues of food safety and testing.

- Enter into EAEU agreements on requirements for food products and ingredients imported into the EAEU so as to be able to follow the same set of rules and standards regarding food, health and phytosanitary standards. For example, representatives of Kyrgyzstan have requested the regulator/ inspectorate not to allow imports of unfortified flour.

Indicators and scores

P.5.1 Mechanisms are established and functioning for detecting and responding to foodborne disease and food contamination – Score 4

This score is based on the strengths of the legislative and policy framework, and on the links and cooperation between ministries, responsible departments and agencies, including the use of joint protocols and facilitating agreements. However, there is a need for ongoing training and development to maintain the required capacity to ensure safety of food products, inspections and investigations.

Strengths/best practices

- There is a robust legislative framework in the area of food safety, which is currently being reviewed and includes draft legislation on food processing companies.

- A food product safety programme is being implemented with a view to introducing and providing training on HACCP in the food industry, thereby ensuring the safety of food products and reducing the risk of foodborne disease outbreaks.

- Investigations of foodborne disease outbreaks are being conducted in accordance with the methodological guidelines entitled: "Investigation of cases of food poisoning"; training activities are being conducted on joint provision of services and exercises in the area of investigation methods. The results of investigations are disseminated to the public, emergency departments and the food sector through the media.

Areas that need strengthening/challenges

- Kyrgyzstan is not currently a member of the WHO-FAO International Food Safety Authorities Network (INFOSAN).

- The equipment and testing methods used by the laboratories of the Epidemiological Surveillance Department and the Veterinary Inspectorate to ensure the safety of food products do not meet EAEU requirements; currently, the laboratories are able to conduct only 85% of the tests required. The laboratories do not undergo proficiency and accreditation tests; at present only 15 of the 51 laboratories are accredited. Proficiency testing was recently carried out, and was found to be inadequate.

- There are gaps in maintaining staff levels and providing training for staff. In the Epidemiological Surveillance Department, only two of the five staff members needed are currently in post. Insufficient attention is given to training State epidemiological control officers, inspectors and customs officials in order to develop the necessary skills in food safety, inspections and investigation.

- There is no training in HACCP principles in the food industry to ensure the processing of safe and healthy food products and reduce the risk of foodborne diseases. To date, there are no training/ advisory centres for this kind of training.

- There are no information systems or capacity for electronic tracking of imported food products, nor any means for ensuring that Kyrgyz food imports into the EAEU meet the food safety standards expected of an EAEU Member State.

Biosafety and biosecurity

Introduction

Working with pathogens in the laboratory is vital to ensuring that the global community possess a robust set of tools — such as drugs, diagnostics, and vaccines — to counter the ever evolving threat of communicable diseases.

Research with infectious agents is critical for the development and availability of public health and medical tools that are needed to detect, diagnose, recognize, and respond to outbreaks of communicable disease of both natural and deliberate origin. At the same time, the expansion of infrastructure and resources dedicated to working with infectious agents has raised concerns regarding the need to ensure proper biosafety and biosecurity to protect health workers and the community. Biosecurity is important in order to secure infectious agents against those who would deliberately misuse them to harm people, animals, plants, or the environment.

Target

A whole-of-government national biosafety and biosecurity system is in place, ensuring that especially dangerous pathogens are identified, held, secured and monitored in a minimal number of facilities according to best practices; biological risk management training and educational outreach are conducted to promote a shared culture of responsibility, reduce dual use risks, mitigate biological proliferation and deliberate use threats, ensure safe transfer of biological agents, and that country-specific biosafety and biosecurity legislation, laboratory licensing, and pathogen control measures are in place as appropriate.

Kyrgyzstan level of capabilities

Biosafety and biosecurity are concepts that are related, but not identical. Biological safety concerns the protection of people and the environment from the effects of potentially dangerous biological agents. Biosecurity means protection from losses, theft, spillage or intentional improper use of microbial agents, toxins or information connected with an investigation. Thus, biological safety requires procedures and practices to prevent the risk of infection in the workplace, whereas biosecurity is directed at guaranteeing the protection of biological materials and corresponding secret information.

Kyrgyzstan does not currently have national legislation on biosafety and biosecurity, although many aspects are considered in some of the regulations. Laboratories that work with dangerous pathogens generally do have a list of the pathogens that are being worked on and are stored. Dangerous pathogens are assigned a passport, and access to them is restricted and controlled. Other laboratories do not maintain an inventory list of the pathogens they are working with, and do not conduct a risk assessment on their activities.

Risk assessments are only carried out in accredited laboratories where staff are trained in modern techniques and they were introduced to ensure biological safety. Staff from the animal health sector also take part in training. There are areas for improvement at the laboratory level: a more effective management system is needed in relation to biosafety and biosecurity in the animal health and public health sectors.

Information about biosafety and biosecurity was presented in the national presentation, and also in the national self-assessment on biosafety and biosecurity and during the mission visits to the facilities.

Recommendations for priority actions

- Introduce national legislation on biosafety and biosecurity and conduct a review of the legislative and regulatory framework.

- Embed a sustainable national system of training for trainers on biosafety and biosecurity.

- Review university core curricula on laboratory work with a view to including classes on biosafety and biosecurity.

- Introduce mechanisms for ensuring laboratories are complying with legislation.

Indicators and scores

P.6.1 Whole-of-government biosafety and biosecurity system is in place for human, animal and agriculture facilities – Score 3

Private laboratories are licensed by the Ministry of Health. There are no private laboratories in the veterinary sector. All laboratories are inspected once a year but, in the event that a problem arises, current legislation does not allow for a further inspection of the laboratory, and there is no mechanism for compulsory enforcement.

Strengths/best practices

- A national association on biosafety has been set up.

- Dangerous pathogens and toxins are generally worked with in minimal quantities and on controlled premises.

- A large project to support biosafety and biosecurity is being conducted by the Central Veterinary Laboratory.

- The tools and resources used in diagnostic support do not require the cultivation of dangerous pathogenic microorganisms (such as polymerase chain reaction).

- A system for licensing of private laboratories is in place.

Areas that need strengthening/challenges

- There is no national legislation in the area of biosafety and biosecurity.

- Policies in the area of biosafety and biosecurity are outdated.

- Not all laboratories undertake risk assessments in accordance with the volume of work being undertaken.

- Oversight monitoring of biosafety and biosecurity is only conducted once a year and therefore is not conducted following any problems that arise.

- The country does not have mechanisms to ensure that laboratories comply with legislation.

- The country does not have licensed organizations for checking and maintaining biosafety cabinets and the other technical equipment needed to ensure biosafety.

P.6.2 Biosafety and biosecurity training and practices – Score 3

Many workers have undergone training in biosafety and biosecurity in the framework of international training, but there is scarcely a single national training programme of future specialists and the topic is not covered fully in core training.

Strengths/best practices

- Kyrgyzstan has a training programme in place at most of the premises in the public health and animal health protection sectors that store and work with dangerous pathogens and toxins.

- The staff has undergone training in State laboratories on the transportation of infectious materials in accordance with United Nations standards.

- Several experts in biosafety and biosecurity have undergone training within the framework of the International Scientific Technical Centre Project K-2052 on training of trainers on biosafety and biosecurity to minimize bio-risks in Kazakhstan and Central Asian countries at the Kazakh Scientific Centre for Quarantine and Zoonotic Diseases.

Areas that need strengthening/challenges

- The country does not have any training-of-trainers programmes on biosafety and biosecurity.

- There is no sustainable academic training on biosafety and biosecurity, and classes on this topic are not included in the core curriculum of training programmes.

- There is no training on biosafety and biosecurity for the private sector.

Immunization

Introduction

Immunization is one of the most successful global health interventions and one of the most cost-effective ways to save lives and prevent disease. Immunizations are estimated to prevent more than two million deaths a year globally.

> **Target**
>
> *A functioning national vaccine-delivery system — with nationwide reach, effective distribution, access for marginalized populations, adequate cold chain, and ongoing quality control—that is able to respond to new disease threats.*

Kyrgyzstan level of capabilities

The existing national immunization programme came into effect in 1994 and currently includes prophylaxis against the following 11 infections: measles, rubella, diphtheria, tetanus, poliomyelitis, tuberculosis, epidemic parotitis (mumps), pertussis (whooping cough), hepatitis B, haemophilus influenza type b (Hib) and pneumococcal infection. Outside of this national programme, the National Centre for Immunoprophylaxis provides vaccinations against flu and meningococcal infections for pilgrims travelling to Mecca, in accordance with the requirements of Saudi Arabia. The programme reports consistently show rates of vaccination coverage against measles, mumps and rubella (MMR) of more than 95% of children aged 12 months. The reach of the unbroken cold chain for vaccine supplies also, it is claimed, covers no less than 90% of the territory of the country. Although some of the equipment is outdated, fridges are to be replaced soon with new ones purchased through Gavi.

In the framework of regional efforts to support countries and immunization programmes, periodic programme reviews are conducted in WHO Member States. Kyrgyzstan has not conducted a review for more than 10 years, and this was the subject of a special report at the end of July 2016 (with the accompanying document). As the country had experienced a serious outbreak of measles in 2014–2015, affecting children aged one to four years and children of school age, questions were raised about the quality of the administrative data, possible immunity gaps among certain groups in the adult population, and about geographic distribution. A multiple indicator cluster survey (MICS) conducted in 2014 suggested that coverage did generally match up with the administrative coverage, with a slight (1–3%) reduction, but the evaluation did reveal some issues with the counting of risk groups when determining communicable disease indicators on the basis of coverage. However, most importantly it showed the practice of financial incentives at local level and the achievement of the target of vaccination coverage of more than 95% of the territory of the country. Coverage is still considered high, at about 90%, but there continues to be groups of unvaccinated individuals, which is probably the reason for the outbreak. Catch-up vaccinations have been carried out, after which good coverage was reported. In 2016 the country did not have a single case of measles.

The report also mentions that vaccination cards are not being updated by medical staff after immunizations, making it harder to conduct a reliable house-to-house survey of vaccination coverage, as this is sometimes reliant on the memories of medical staff. An electronic immunization registry is being developed on the basis of the birth registry, which will help to ensure coverage can be calculated accurately in future.

In recent years there has been an increase in the number of vaccination refusals on grounds of religious belief and due to scepticism about vaccines by some parents after reading negative information about vaccines on the Internet.

Recommendations for priority actions

- Introduce vaccination cards for children and create an electronic immunization registry.

- Encourage the submission of realistic information about vaccination coverage and target population groups and avoid penalizing staff for low coverage.

- Consider the possibility of conducting a national seminar to discuss the data obtained during the measles outbreak, the lessons learnt and strategies to prevent outbreaks of other vaccine-preventable diseases.

- Establish, in conjunction with interested parties, an integrated plan on public information questions and the implementation of specific strategies to reduce the occurrence of vaccine refusals and negative attitudes to vaccination.

Indicators and scores

P.7.1 Vaccine coverage (measles) as part of the national programme – Score 4

According to survey data, MMR vaccine coverage is more than 90% of the territory of the country (Demographic and Health Survey/DHS 2012, MICS 2014).

Strengths/best practices

- Over the past five years, vaccination coverage has been high (administrative coverage of more than 95%, with the exception of MMR; more than 90% according to data from the MICS).

- The creation of an electronic vaccination registry is being pushed forward (an electronic registry of births is being introduced and a software package for electronic immunization records is being piloted)

- Information about vaccination coverage is presented in a complete and timely manner.

- BCG and doses against hepatitis B are registered on vaccination cards at birth, which improves the follow up work by medical establishments.

- The vaccination schedule has been reviewed with regard to new vaccinations.

- Immunization practice and handling of vaccines overall complies with the norms; the nurses who give the vaccinations regularly undergo recertification.

- All vaccinations are given in medical establishments by certified nurses.

Areas that need strengthening/challenges

- Data on the spread of a measles outbreak (2014–2015) and investigation data (DHS 2012, MICS 2014) point to a lower level of vaccine coverage than is reported.

- Administrative expectations in relation to meeting targets as well as financial penalties sometimes lead health workers to present inaccurate indicators of coverage.

- More accurate counting of vulnerable groups is needed when calculating communicable disease indicators derived from medical records (as a consequence of population movement, and the presence of unregistered persons).

- Children's vaccination record cards are not being used for families.

- Despite the progress made in resolving the issues of migration and the populations of remote/hard-to-reach districts, there continue to be problems with the immunization of children in these groups.

- The number of vaccination refusals is increasing for a variety of reasons.

P.7.2 National vaccine access and delivery – Score 4

Not all the equipment in the cold chain has yet been updated; some premises lack generators, and 80% of immunization facilities also have no generators.

Strengths/best practices

- The modernization of the cold chain equipment, which has been/will be provided thanks to the Gavi health care strengthening programme and the SWAP programme.

Areas that need strengthening/challenges

- According to the joint review conducted in July–August 2016, the procedure for managing vaccine supplies at the national level was outdated and did not always correspond with SOPs.

- Not all medical facilities have fridges of the required quality standard (although this is being resolved).

DETECT

National laboratory system

Introduction

Public health laboratories provide essential services including disease and outbreak detection, emergency response, environmental monitoring, and disease surveillance. State and local public health laboratories can serve as focal points for a national system, through their core functions for human, veterinary and food safety including: disease prevention, control, and surveillance; integrated data management; reference and specialised testing; laboratory oversight; emergency response; public health research; training and education; and partnerships and communication.

> ***Target***
>
> *Real-time biosurveillance with a national laboratory system and effective modern point-of-care and laboratory-based diagnostics.*

Kyrgyzstan level of capabilities

Kyrgyzstan has several laboratory networks: a vertical programme, public health laboratories (including the laboratories of the Epidemiological Surveillance Department), hospital laboratories and urgent medical care laboratories. The animal health protection sector is also building its own network of laboratories. These laboratory systems regularly bring laboratory data together and present it at the central level, and also compile international reports. New laboratories are being built, and some laboratories are being refurbished. There is a system for the transportation of animal and human specimens within the country, and there are means of transportation and cold-chain equipment.

The laboratories that serve patients and other clients come under a range of ministries and departments, including:

- the Ministry of Health (clinical diagnostic laboratories, public health laboratories, private laboratories)
- the Ministry of Agriculture (veterinary and phytosanitary laboratories)
- the Ministry of Education and Science (research laboratories)
- the Ministry of Internal Affairs (clinical diagnostic, forensic, and bacteriological laboratories)
- the Ministry of Transport and Communications (public health and clinical diagnostic laboratories)
- State Committee for National Security (clinical diagnostic and bacteriological laboratories).

The Ministry of Health has established a laboratory coordination council, whose membership includes representatives of the various health care laboratory systems (State Sanitary Epidemiological Control, tuberculosis, HIV and private laboratories) and employees of the laboratory systems under other ministries, to work on the national laboratory policy, the strategic plan and road map for improvement of laboratory services nationwide.

Information on the national laboratory system was presented in the country presentation and self-assessment. The animal health sector was open to discussion of its capacity, evaluation and the determination of priority activities.

Recommendations for priority actions

- Implement a quality management system in all laboratories.

- Train laboratory specialists on a regular basis to protect against the negative consequences of high staff turnover.

- Improve the procurement process for laboratories, especially for urgent purchases in small quantities.

- Increase the coordination of the work of health care laboratories with the aim of improving electronic laboratory services and intersectoral communication.

Indicators and scores

D.1.1 Laboratory testing for detection of priority diseases – Score 4

In all the multilevel systems operating in the country, laboratories are capable of performing diagnostic testing for priority diseases.

Strengths/best practices

- The existing laboratory system is capable of performing at least nine of the ten core tests determined by the International Health Regulations, with the exception of culture testing of poliovirus.

- The Veterinary Institute is cooperating with the OIE and establishing plans for testing of brucellosis, cystic and alveolar echinococcosis, plague, rabies and anthrax.

Areas that need strengthening/challenges

- The procurement system is not appropriate for ordering of small quantities.

- There is a lack of national training on quality management of laboratory investigations.

D.1.2 Specimen referral and transport system – Score 4

There is a system for transporting specimens from 50–80% of institutions at the intermediate level to the national reference laboratories.

Strengths/best practices

- Laboratory management in the State sector has a system of links.

- Four new regional veterinary laboratories are being built (resources to the tune of 1.8 million US dollars have been earmarked for this purpose).

- There are mechanisms in place for transporting specimens.

Areas that need strengthening/challenges

- The roles and responsibilities of laboratory establishments and networks are not documented; the terms of reference (T3) of laboratories and networks are not documented.

- There is a lack of coordination of laboratory requirements and measures to create more effective improvement of the network.

DETECT

D.1.3 Effective modern point-of-care and laboratory-based diagnostics – Score 4

Point-of-care testing is possible, with subsequent referral of specimens for further diagnostics.

Strengths/best practices

- All State medical facilities are linked with those at the next level.

- In the State sector, a strategy has been developed for conducting specific diagnostic investigations.

- In specific laboratories and for vertical programmes, staff receive training in diagnostic methods such as polymerase chain reaction.

Areas that need strengthening/challenges

- Due to high staff turnover there is insufficient advanced training on modern methods at all levels.

- There is insufficient capacity to support each and every laboratory.

- Tests are insufficiently standardized across the network as a whole.

D.1.4 Laboratory quality system – Score 3

A licensing system for private laboratories exists, but there is no requirement that laboratories should comply with any national or international quality standards. There is no external quality control of private laboratories.

Strengths/best practices

- There are currently two laboratories accredited under ISO 15189 and 21 laboratories accredited under ISO 17025.

- Laboratories in the State sector take part in an international skills audit.

- Standards for laboratories are currently under review.

Areas that need strengthening/challenges

- The licensing process is not capable of ensuring the relevant minimum quality standards in all laboratories in the State and private sectors.

- There are gaps in the national external quality control of laboratories.

Real-time surveillance

Introduction

The purpose of real-time surveillance is to advance the safety, security, and resilience of the Nation by leading an integrated biosurveillance effort that facilitates early warning and situational awareness of biological events.

Target

Strengthened foundational indicator- and event-based surveillance systems that are able to detect events of significance for public health, animal health and health security; improved communication and collaboration across sectors and between sub-national (local and intermediate), national and international levels of authority regarding surveillance of events of public health significance; improved country and regional capacity to analyse and link data from and between strengthened, real-time surveillance systems, including interoperable, interconnected electronic reporting systems. This can include epidemiologic, clinical, laboratory, environmental testing, product safety and quality, and bioinformatics data; and advancement in fulfilling the core capacity requirements for surveillance in accordance with the IHR (2005) and the OIE standards.

Kyrgyzstan level of capabilities

Kyrgyzstan has had an online electronic system for collecting information about communicable diseases for more than 10 years. It is financed by the United States Centers for Disease Control and Prevention (CDC) under a programme to support pandemic influenza control. Kyrgyzstan has a list of notifiable diseases, including quarantinable diseases. Syndromic surveillance includes monitoring and control of severe acute respiratory syndrome (SARS), Ebola virus, acute flaccid paralysis, acute watery diarrhoea with dehydration, and jaundice with fever.

When a notifiable communicable disease is suspected, the attending physician reports the case to the local district-level epidemiological centre (often located at a hospital) within 24 hours, where the data are immediately entered into the system. Laboratory confirmation is sent to the attending physician and the local epidemiological centre, where the result is annexed to the report. If the suspected diagnosis is not confirmed, the provisional report may be deleted from the system at the peripheral level. A report of a suspected case should normally be confirmed within one week. The local laboratory sends positive test results for notifiable diseases to the reference laboratory for verification. The epidemiological centre also collects a list of positive results from the laboratories on a monthly basis, for comparison with the reports received from the attending physicians. There is a list of priority diseases classified as especially dangerous infections or quarantinable diseases: brucellosis, anthrax, rabies, plague, cystic and alveolar echinococcosis, tuberculosis and Q-fever. These must be reported by telephone.

Numerical indicators are determined weekly and monthly and analysed at both regional and national levels. A bulletin is issued monthly, and the data are also published on the Internet. The figures submitted are aggregated for each month and compared with the indicators for the same period the previous year. Further analysis is carried out on a quarterly and annual basis, and a special team compiles and disseminates forecasts nationally.

Just as cases must be reported while they are still only suspected, event-based information will be included in the report where an outbreak is suspected. Syndromic surveillance uses the same reporting system.

DETECT

The real-time epidemiological surveillance system is extensively developed in Kyrgyzstan and information is submitted within the established timeframe on the same day – it is thus operating in real time.

Recommendations for priority actions

- Resolve the issue of funding the electronic reporting system on a sustainable rather than a project basis.

- Identify mechanisms for involving private laboratories in the reporting system.

- Take measures to reduce staff turnover due to staff leaving in search of higher pay.

- Consider installing a laboratory network for electronic reporting.

- Provide training and retraining of staff at all levels, including the staff who enter epidemiological surveillance data at the peripheral level.

Indicators and scores

D.2.1 Indicator- and event-based surveillance systems – Score 4

The existing surveillance system ensures the collection of indicators, but will also include the collection of data about events before diagnosis is confirmed.

Strengths/best practices

- Communicable diseases are reported on the basis of suspicion, with follow up confirmation.

- As cases are reported while they are still only suspected, an accumulation of cases with similar symptoms can act as a sign of a possible outbreak before the disease is confirmed.

Areas that need strengthening/challenges

- There are insufficient training opportunities for workers handling data at the peripheral level.

- Staff turnover is high.

D.2.2 Interoperable, interconnected, electronic real-time reporting system – Score 4

Reporting is carried out in real time, as reports are sent when a disease is suspected and almost always on the same day or at the latest within 24 hours. Information about especially dangerous infections and quarantinable diseases is reported by telephone immediately.

Strengths/best practices

- An online system for collecting public health reports, which has been working for 10 years, was recently renewed.

- Reporting is carried out promptly.

- There is epidemiological surveillance of animal health, although not in real time.

Areas that need strengthening/challenges

- An online system has been funded through project financing for over 10 years, but has no permanent funding.

- The veterinary epidemiological surveillance system is not electronic and does not operate in real time.

- The link between the public health system and the animal health protection system is generally made at a national level; cooperation at the regional level is weaker.

D.2.3 Analysis of surveillance data – Score 5

Systematic analysis, risk analysis and reporting is carried out by a specially appointed team.

Strengths/best practices

- Data analysis is carried out at both regional and national level.
- Specially appointed staff, including epidemiological staff, conduct in-depth analysis at the national level.
- Systematic reporting is published in a bulletin and on the website.

Areas that need strengthening/challenges

- There are no obvious problems.

D.2.4 Syndromic surveillance systems – Score 4

There is a syndromic surveillance system for detecting five core syndromes, but there is not currently capacity for supporting other countries in the development of similar systems.

Strengths/best practices

- The system based on the reporting of syndromic surveillance data operates in real time, just like the general epidemiological surveillance system.
- The system ensures the detection of five core syndromes: SARS, viral haemorrhagic fever, acute flaccid paralysis, acute watery diarrhoea with dehydration and jaundice with high temperature.

Areas that need strengthening/challenges

- Staff turnover is high.
- Medical workers do not receive training in syndrome recognition often enough.

DETECT

Reporting

Introduction

Health threats at the human–animal–ecosystem interface have increased over the past decades, as pathogens continue to evolve and adapt to new hosts and environments, imposing a burden on human and animal health systems. Collaborative, multidisciplinary reporting on the health of humans, animals, and ecosystems reduces the risk of diseases at the interfaces between them.

Target
Timely and accurate disease reporting according to WHO requirements and consistent coordination with FAO and OIE.

Kyrgyzstan level of capabilities

Kyrgyzstan has designated a NFP on IHR within the Epidemiological Surveillance Department, who is responsible for providing information to WHO in accordance with the IHR. There is a national coordinating centre on communication in the veterinary system to provide reports to the World Organization for Animal Health (OIE).

Protocols and regulations regarding the provision of information within the framework of IHR have been agreed and approved at the ministerial and departmental level; however, approval at government level is still pending. This is expected in the next two months, as they have previously been returned at least twice for drafting revision and should now be ready for approval. The system is already in operation, and the NFP on IHR and IOE have access to a training package and examples of best practice, and have also taken part in regional seminars on IHR in other countries. According to information given in the country presentation, all reports about public health emergencies of international concern (PHEIC) are channelled through the WHO country office and are not currently sent directly to the WHO Regional Office for Europe in Copenhagen.

Information has been sent to OIE about the following events: the loss of 1500 cattle in 2012 due to counterfeit vaccines (not reported within the IHR framework), and the detection of plague in animals; however, this was not reported within the first 24 hours. In August 2013, a human case of plague was recorded, and WHO was informed about this (and undertook consultations). However, the report was made through the WHO country office, rather than to the WHO Regional Office as required under the IHR. An outbreak of measles a few years ago was also notified via the WHO country office, and it took several weeks for the information to make it to the WHO Regional Office. A case concerning the import of radioactively contaminated Japanese cars was also not reported. Kyrgyzstan is therefore capable of identifying potential PHEIC, but thus far has not demonstrated the ability to notify WHO within 24 hours.

In general, the impression created is that IHR is considered the sole responsibility of the Ministry of Health, and therefore coordination between ministries in relation to implementation of IHR is not optimal.

Recommendations for priority actions

- The existing protocol for the provision of information under the IHR should also be ratified at Government level.
- An exercise should be conducted on the provision of information about IHR, in order to demonstrate that the reporting system works.

- Training should be conducted, including on reporting, with institutions in other sectors with the aim of involving them in IHR implementation.

Indicators and scores

D.3.1 System for efficient reporting to WHO, FAO, and OIE– Score 3

The country has demonstrated the capability of detecting potential PHEIC and providing information to WHO and OIE, but not within 24 hours.

Strengths/best practices

- There is a decision by the Chief Medical Officer of the Kyrgyz Republic, and the NFP's terms of reference have been determined; the NFP works in accordance with IHR and OIE principles.

- The regulations have been amended and documents have been approved at the ministerial and departmental levels.

Areas that need strengthening/challenges

- The legislation required by the existence of the systems and the appointment of the NFP has still not been approved at Government level (approval is expected in early 2017).

D.3.2 Reporting network and protocols in country – Score 3

Protocols, procedures and regulations on the provision of the information on potential PHEIC established and, although the final approval by the Government is expected, it has still not been used in practice.

Strengths/best practices

- Protocols and regulations have been developed on reporting under the IHR.

- A NFP has been appointed on IHR and for submitting information to OIE.

Areas that need strengthening/challenges

- The capability to report information to the WHO Regional Office within 24 hours of confirmation of the event has not been demonstrated.

DETECT

Workforce development

Introduction

Workforce development is important in order to develop a sustainable public health system over time by developing and maintaining the highly qualified public health workforce with appropriate technical training, scientific skills, and subject-matter expertise.

Target
States Parties should have skilled and competent health personnel for sustainable and functional public health surveillance and response at all levels of the health system and the effective implementation of the IHR (2005).

Kyrgyzstan level of capabilities

Kyrgyzstan has strong capacity for multidisciplinary human resources at national, intermediate and local levels. Education in the field of medicine and public health is offered at six universities/faculties in Kyrgyzstan, turning out in total approximately 900 specialists in the field of medicine and 10–15 specialists in the area of public health annually. Moreover, 18 colleges provide medical secondary education, producing 60–70 mid-level public health specialists each year.

Kyrgyzstan provides various levels of field epidemiology training, either in Kyrgyzstan or in the context of FETPs organized in another country (Kazakhstan) under an agreement in force since 2003. To date, 21 students from Kyrgyzstan have completed the FETP programme. There is also a workplace training programme with a range of courses designed to be delivered over periods of between two and four weeks; 40–60 epidemiologists are trained through this programme every year.

This high level of capacity, however, is limited by a high staff turnover, which presents a serious threat to sustainable epidemiological public health surveillance and to the application of response measures in the country. For that reason, Kyrgyzstan has developed a strategy in relation to workforce (not made available to the mission to allow familiarization). One of the approaches to achieving the goal is the "Doctor Deposit" programme, funded at national level and offering incentives to qualified workers who will work in remote areas.

Recommendations for priority actions

- Extend the breadth and duration of the "Doctor Deposit" initiative, including national funding, in order to strengthen (public) health services in remote regions.

- Support training-of-trainers courses to strengthen the human resource capacity and share experiences among specialists.

- Offer rewards for qualified staff to incentivize workers to remain in roles providing (public) health services.

- Increase the number of Kyrgyz participants in the FETP programme in Kyrgyzstan and ensure State funding for students.

Indicators and scores

D.4.1 Human resources are available to implement IHR core capacity requirements – Score 4

The population of Kyrgyzstan comprises approximately six million people. In accordance with the target recommendation to make available at least one trained field epidemiologist (or equivalent) per 200 000 population, Kyrgyzstan's public health service needs to have a total of 30 trained field epidemiologists.

Kyrgyzstan has achieved high human resources capacity in epidemiology specialists at the national, intermediate and local levels. The number of workers with higher education qualifications at the national/intermediate/local levels is 22/39/57 respectively, with the number of workers with intermediate level education being 11/81/157 respectively. Moreover, demand is almost met for clinicians, biostatisticians, information systems specialists and laboratory personnel.

Strengths/best practices

- Kyrgyzstan has multidisciplinary personnel: epidemiologists, veterinarians, physicians and laboratory specialists or technicians of various levels of education, at the national, intermediate and local levels.

Areas that need strengthening/challenges

- Low pay (on average 70–80 US dollars a month) is leading to a drain of qualified specialists from the State health care system to the private sector.

- No specialized study programmes have been developed for laboratory personnel: there is no separate training programme for laboratory specialists; too few hours are spent on laboratory work in the training programmes of medical faculties.

- Opportunities for sending and receiving multidisciplinary staff within the country (redistribution of resources) and at the international level are limited; there are gaps in the procedures needed for such exchanges.

D.4.2 Field epidemiology training programme or other applied epidemiology training programme in place – Score 4

Students from the Kyrgyz Republic take part annually in the FETP in Kazakhstan, which is based on an FETP curriculum from the CDC, which supports it. Moreover, training for graduates and mid-level staff is carried out at national level on the principles of prophylaxis and epidemiology of communicable diseases.

Strengths/best practices

- Kyrgyzstan has established a basic and mid-level training programme on applied epidemiology within the country and has an agreement with Kazakhstan for the participation of students in the FETP (advanced level). Kyrgyzstan's capability with regard to the applied epidemiology study programme is evaluated to be higher than a score 4, as there are already three levels to this training programme.

Areas that need strengthening/challenges

- There is a lack of sustainable national funding to ensure the participation of Kyrgyz students in FETP in Kazakhstan.

D.4.3 Workforce strategy – Score 3

Kyrgyzstan is facing significant difficulties in sending qualified staff to various areas of the country, especially remote areas. In order to maintain human resources capacity across the whole country, a national plan for the distribution of graduates (the "Doctor Deposit" initiative) has been adopted, which provides benefits for specialists working in remote regions. Moreover, medical faculties have developed plans on strategic human resources development.

DETECT

Strengths/best practices

- National policy on education in medical faculties, together with the "Doctor Deposit" initiative, constitute an effective national strategy on workforce. The experience of the first years of implementation of this programme is recognized as very promising.

- In addition to the usual monthly salary, public health specialists are also given monetary resources for acquiring particular experience and qualifications, and also for conducting scientific research.

- There are regular professional development courses for (public) health care personnel.

Areas that need strengthening/challenges

- The national workforce strategy is not currently reviewed regularly, is not monitored and is not included in annual reports.

DETECT

RESPOND

Preparedness

Introduction

Effective implementation of IHR requires a multisectoral/multidisciplinary approach on the basis of national partnership relationships for the creation of sustainable systems for alert and response.

Coordination of national resources, including the appointment of the NFP on IHR, who is the national centre for links on IHR, is the chief condition for the implementation of IHR. The NFP should be accessible at any time for connections with WHO regional contact points on IHR and with all the relevant sectors and other interested parties in the country.

Member States should present to WHO detailed contact information about the national coordinating centres on IHR, constantly update this information and annually confirm it.

Target

Development and maintenance of national, intermediate (district) and local/primary level public health emergency response plans for relevant biological, chemical, radiological and nuclear hazards. This covers mapping of potential hazards, identification and maintenance of available resources, including national stockpiles and the capacity to support operations at the intermediate and local/primary levels during a public health emergency.

Kyrgyzstan level of capabilities

The mission was informed about mechanisms connected with the national system for ensuring preparedness for potential risks to public health in accordance with IHR requirements. Capabilities in this area, as reported, are high. There is coordination between the various stakeholders, such as the Ministry for Emergencies, the Ministry of Health, and the Ministry of Agriculture, veterinary services and other relevant State institutions. Measures have been adopted to ensure the availability of human resources capacity, such as training local health workers and medical personnel at the central, regional and district levels. If necessary, assistance mechanisms can be activated in the context of Kyrgyzstan's membership of the EAEU. The Ministry of Health recently adopted a multi-hazard national emergency response plan for 2017–2021. This plan should be approved at government level in the first quarter of 2017.

Risk mapping and resource mapping is carried out regularly and renewed at least once a year in the light of updated information about the public health situation. Measures are taken to stock and replenish vital stores at the regional and local levels. In the event of an emergency affecting the whole country, such as an earthquake, landslides, flooding or disease outbreaks, the Ministry for Emergencies is empowered to take immediate measures based on the evaluation of the situation by the Kyrgyz Interdepartmental Civil Protection Committee, under the leadership of the Prime Minister. All ministries and relevant national State and private organizations, as well as, if required, international organizations, may participate in the committee. The NFP has been officially appointed by the Ministry of Health, but this role has (so far) not been officially formalized at government level. For this reason, the NFP's powers in the framework of the whole-of-government approach are limited.

Recommendations for priority actions

- Clarify the situation in relation to the role of the NFP, their location, tasks, responsibilities and duties.

- Give local health workers the opportunity to undertake preparedness training on health, both within Kyrgyzstan and abroad.

- Provide sufficient and sustainable funding for the health worker retention programme at the central, regional and district levels.

- Adopt the multi-hazard national plan for emergency preparedness and response developed by the Ministry of Health as a national normative document.

Indicators and scores

R.1.1 Multi-hazard national public health emergency preparedness and response plan is developed and implemented – Score 4

The Ministry for Emergencies is responsible for national measures to ensure emergency preparedness and response. The Ministry has appointed experts in specific sectors, including health. In parallel to this, the Ministry for Emergencies has developed a multi-hazard national public health emergency preparedness and response plan. It is reported, and expected, that this plan will be approved at the national level in early 2017.

Strengths/best practices

- High level of accountability among health specialists in relation to preparedness activities; counter-epidemic teams are operational on demand.

- The units responsible for health preparedness activities maintain an appropriate level of operational efficiency, despite high staff turnover.

- Coordination between the various sectors is ensured by emergencies commissions in line with currently applicable normative instruments.

- A public health department within the Ministry of Health supports close and regular contact with the authorities at regional and district levels.

- Resources can be reassigned at short notice and as needed for preparedness and response.

- Measures are being taken to ensure that all local health workers are included in training sessions on preparedness issues.

Areas that need strengthening/challenges

- Lack of training programmes on health preparedness measures at the central, regional and district levels.

- Failure to harmonize the rules and regulations on emergency preparedness and response followed by the various ministries.

- Multisectoral (horizontal) linkage between current measures to ensure preparedness is weak.

R.1.2 Priority public health risks and resources are mapped and utilized – Score 4

Ministry of Health workers presented a well-functioning mechanism to assess health risks and maintain resources. Mapping of resources is part of this mechanism. The control and management of reserves for emergencies is carried out on a regular basis, generally more than once a year.

Strengths/best practices

- Risk and resource mapping is carried out on a regular basis, formally, at least once a year.

- Risk assessments are repeated and the quantity and quality of reserves are checked during regular inspections, which are carried out by health experts in the field or in the course of investigating public health incidents (when such incidents are suspected).

- Information from officials at the Agency for the Protection of Wildlife, workers at tailing ponds and community health workers is currently included in the risk assessment.

- Tour operators, hunters and local communities are informed about public health risks.

Areas that need strengthening/challenges

- Mapping of medical risks is inadequately coordinated among the agencies connected with health protection, such as the Ministry of Health, the Ministry of Agriculture, the Veterinary Service and the National Agency for Environmental Protection and Forestry.

- There is insufficient information sharing and joint training of specialists in health protection between the health sector and animal health protection.

- Preparedness measures are insufficiently coordinated at the operational level between the various sectors and specialists (e.g. between the environmental protection, public health, wildlife protection, clinical health care and veterinary services sectors).

Emergency response operations

Introduction

A public health Emergency Operations Centre (EOC) is a central location for coordinating operational information and resources for strategic management of public health emergencies and emergency exercises. EOCs provide communication and information tools and services and a management system during a response to an emergency or emergency exercise. They also provide other essential functions to support decision-making and implementation, coordination, and collaboration.

Target

Countries will have a public health EOC functioning according to minimum common standards; maintaining trained, functioning, multisectoral rapid response teams and "real-time" biosurveillance laboratory networks and information systems; and trained EOC staff capable of activating a coordinated emergency response within 120 minutes of the identification of a public health emergency.

Kyrgyzstan level of capabilities

Employees of the Ministry for Emergencies and the Ministry of Health could demonstrate on the spot a series of measures and processes for swift and appropriate response to emergencies within the two-hour timeframe established under IHR. Members of this JEE mission team were able to familiarize themselves with wellequipped EOC, operating around the clock, seven days a week, and staffed with qualified personnel. References were made to the Government Decree No. 475 on the State civil protection system (2011), which underpins the functions of the Ministry for Emergencies.

Committees have been formed in every ministry, except the Ministry for Emergencies, to handle the response to emergencies as required. The mission team was informed of the existence of action plans for the event of fire, industrial, chemical and radiation/nuclear hazards, and about how the ministry reports on the ecological and economic consequences of national scale emergencies. An alert is sent from the district level to the emergencies department at regional level, which makes an initial assessment of events, in particular to assess the technological, biological and social impacts. The regional emergencies department then classifies the situation as routine, of high importance or urgent, which determines the procedure for action (Government Decree No. 733 of 17 November 2011 on approval of the classification of emergencies and the assessment criteria in the Kyrgyz Republic.

Best practice is for information to flow upwards through the district and regional levels, after which response measures are taken, with actions being coordinated by the EOC, through the relevant ministries and in accordance with the established emergency regime for the event.

Recommendations for priority actions

- Provide regular training and retraining in emergency response methods, including for employees of key medical facilities.

- Acquire expertise in emergency operations and renew equipment for use in emergencies (50% of equipment dates from Soviet times).

- Establish cooperation with neighbouring countries, including in the context of the EAEU, on emergency response, and on mechanisms of shared learning and cooperation.

Indicators and scores

R.2.1 Capacity to activate emergency operations – Score 5

The score was awarded on the basis of joint discussion of the information presented by the national partners about the level of capabilities and general compliance. The external members of the mission team were able to verify the existence and capabilities of the EOC during visits. The reports on the work of the EOC justify such a high score.

Strengths/best practices

- The EOC operates around the clock, seven days a week and is part of the overall structure of the Ministry for Emergencies.

- Employees of the EOC undergo regular training on emergency response issues; separate emergency procedures are in place for specific sectors.

- The EOC is well equipped, and its personnel have the capacity to reach every district/region within the required two-hour response window.

Areas that need strengthening/challenges

- There are public health knowledge gaps in the structure of the EOC.

- Wider aspects of health are not adequately included in the EOC's regular training programme curricula.

- Public health service workers at the central, regional and district level do not have adequate knowledge about the EOC, its mandate, structure and operating procedures.

R.2.2 Emergency operations centre operating procedures and plans – Score 5

This score was based on information given in a presentation by personnel from the Ministry of Emergencies and the Ministry of Health. According to their presentation, the EOC has plans and procedures for swift emergency response, as well as the capability for all actions to be coordinated with the Ministry of Health. The working methods, forms and templates that were set out confirmed the capability to mobilize experts in the field. Some of the external members of the JEE team were able to visit the EOC and to verify the facilities and response procedures during that visit.

Strengths/best practices

- A national emergency response system determines the structures and operational roles of personnel, the chains of command and further technical work in specific sectors, including in public health.

- Additional resources for emergency response can be obtained from government reserves.

- The Ministry of Health can request the immediate release of resources from those reserves in order to initiate rapid emergency response.

- In order to determine in real-time the level of support required, and the quantity of additional resources needed for each of the three regimes, action is coordinated between the EOC and the emergency committees at central and regional levels.

Areas that need strengthening/challenges

- The staff of the Centre for Emergencies does not have the necessary experience and knowledge in public health issues (technical and administrative).

- Assistance from internal and external partners is poorly coordinated and insufficiently optimized.

R.2.3 Emergency operations programme – Score 5

The participants from Kyrgyzstan proposed the maximum score on the grounds that this is justified by the example of real cases, when the country fulfilled all the requirements to demonstrate a sustainable level of capability. During recent operational training, a real situation occurred where there was a suspected threat, and the system was able to respond adequately within the two-hour time frame. This experience was taken into account when finalizing and completing the existing response plans and protocols. Nevertheless, before that high score could be agreed, additional documentation was needed for evaluation of the following.

Strengths/best practices

- The EOC system plays a leading role in the response to any major emergency. Public health specialists cooperate on a regular basis with EOC personnel.
- The public health response measures that have been established are carried out as soon as a potential health-related threat is notified, at any time of day.
- In agreement with the local and regional authorities, any alert in relation to public health is assigned to one of three categories: routine, high importance or urgent.
- The Ministry for Emergencies is able to take initial measures within two hours.

Areas that need strengthening/challenges

- A high staff turnover is impacting the quality of response measures high up the system.
- There is a lack of equipment for material and technical provision and operations at all levels of the system.
- There is a lack of personnel, especially mobile personnel, for medical diagnosis and crash and rescue operations in rural areas.

R.2.4 Case management procedures are implemented for IHR relevant hazards – Score 5

Employees of the Ministry of Health told the mission team about the existence of case management procedures for IHR relevant hazards and for especially dangerous diseases. They reported well functioning coordination mechanisms between the relevant organizations and institutions in the areas of zoonoses, food safety, chemical and radiation/nuclear incidents. The transportation of potentially hazardous materials and patients is carried out in accordance with strict principles and SOPs. Personnel receive training on communicable disease control measures. There was no opportunity during the mission to verify the functionality of case management procedures.

Strengths/best practices

- Procedures and guidelines on IHR hazards and epidemic-prone diseases are reported to be available at all public health units at district and regional levels.
- Public health workers are trained in methods to combat IHR-relevant hazards and epidemic disease.
- Additional resources for combating health-related emergencies can be obtained at short notice.

Areas that need strengthening/challenges

- The financial situation of the State sector poses challenges for maintaining the quality of service and emergency response.
- There is a lack of incentives for the retention of public health staff trained in emergency issues at regional and local level.
- Coordination is poor between the departments involved in dealing with emergencies: the Ministry of Health, Ministry of Emergencies, Ministry of Agriculture, Veterinary Services, and the Ministries for Energy and for Transport.

Linking public health and security authorities

Introduction

Public health emergencies pose special challenges for law enforcement, whether the threat is manmade (e.g., anthrax terrorist attacks) or naturally occurring (e.g. flu pandemics). In a public health emergency, law enforcement will need to quickly coordinate its response with public health and medical officials.

Target

In the event of a biological event of suspected or confirmed deliberate origin, a country will be able to conduct a rapid, multisectoral response, including the capacity to link public health and law enforcement, and to provide and/or request effective and timely international assistance, including to investigate alleged use events.

Kyrgyzstan level of capabilities

In Kyrgyzstan a range of (vertical) instructions have been issued that can be construed as a formal agreement between public health and security authorities. The mission was informed about measures intended to establish links between the security authorities and ministries directly responsible for them (i.e. the linear ministries). These measures relate to the adoption of Government Decrees No. 297 of 10 June 2011 on strengthening cooperation between ministries and departments in combating quarantinable and especially dangerous infections, and parasitic diseases, No. 357 of 2 June 2012 on approval of the concept and strategy for comprehensive security of the population and territory of Kyrgyzstan in emergencies and disaster situations until 2020, and No. 404 of 9 July 2013 on approval of the model regulation for cooperation between State bodies of executive power in the realization of related responsibilities. There are instructions on the mandatory sharing of information with security authorities in the appropriate circumstances for eleven ministries and State institutions – including the Ministry for Emergencies, the Ministry of Health, the Ministry of Agriculture, and the Ministry of Internal Affairs. Among other things, these instructions provide for relationships among the border authorities, Interpol, and the State National Security Committee. Moreover, the Ministry of Health, the veterinary service and the Ministry of Agriculture regularly share information about public health-related hazards from diseases of human, animal and plant origin. Parallel investigations in relation to suspected events of a biological, chemical and radiation/nuclear nature can be conducted by the relevant security authorities. According to the law, the necessary technical information may be requested from ministries.

Recommendations for priority actions

- Organize training for public health workers on security issues in relation to unlawful biological, chemical and radiation/nuclear events.

- Provide appropriate communication technology, equipment and means of protection for public health workers.

- Establish SOPs for the coordination of activities between public health and animal health protection specialists and the security authorities.

Indicators and scores

R.3.1 Public health and security authorities (e.g. law enforcement, border control, customs) are linked during a suspect or confirmed biological event – Score 4

During the JEE sessions, the Kyrgyz participants suggested a score of at least 4 for this indicator, because rules and regulations in the area of public health and security are strictly complied with. Examples were presented of real cases of cooperation and of the actions taken during a suspected chemical contamination event in 2015.

Strengths/best practices

- Cooperation between ministries and State security authorities is ensured by Government Decree No. 404 on cooperation between the State bodies of executive power.

- The response to public health emergencies is underpinned by instructions from the Government on cooperation between law enforcement agencies, border agencies, Interpol, the Ministry of Internal Affairs and the State National Security Committee.

- The Ministry of Health, Veterinary Services and the Ministry of Agriculture work together on technical aspects of public health cases in the even to of a security risk.

Areas that need strengthening/challenges

- Inadequate joint training programmes on issues relating to unlawful biological, chemical and/ or radiation/nuclear events for specialists in health, veterinary services, environmental protection organizations and security specialists.

- Technology for the detection, monitoring and verification of illegal activities affecting health is poorly developed and largely outdated.

- Security information is not shared on regular basis between the Ministry of Health, the Ministry of Agriculture, the Veterinary Service, environmental organizations and the Ministry for Emergencies.

Medical countermeasures and personnel deployment

Introduction

Medical Countermeasures (MCM) are vital to national security and protect nations from potentially catastrophic communicable disease threats. Investments in MCM create opportunities to improve overall public health. In addition, it is important to have trained personnel who can deploy for response in case of a public health emergency.

Target
A national framework for transferring (sending and receiving) medical countermeasures and public health and medical personnel among international partners during public health emergencies.

Kyrgyzstan level of capabilities

The Epidemiological Surveillance Department of the Ministry of Health has developed a comprehensive strategy on security for response to emergencies, in force up to 2020, – the concept and strategy for comprehensive security of the population and territory of Kyrgyzstan in emergencies and disaster situations, approved by Government Decree No. 357 of 2 June 2012. The Strategy provides for the establishment of mobile response groups or teams from the Ministry of Health with specific operational responsibilities for members of the team as well as mobilization of medical response resources. All Ministry of Health personnel are classified according to their skills and experience to fulfil the roles on mobile response teams and if necessary, staff from other agencies are brought in. Issues with the assignment or rotation of existing staff need to be resolved and ongoing recruitment and training of staff is needed.

There are sustainable reserves of MCM: vaccines, medicines, personal protective equipment for medical and veterinary response measures. Moreover, Ministry of Health laboratories keep reserves of reactants for diagnostic testing. There is also a reserve fund to allow purchasing of any necessary additional measures. There is a simplified procurement procedure: all that is needed is a request from the Ministry of Health to the Ministry of Finance to authorize urgent purchases from a single supplier. This rule is not extended to veterinary vaccines and medicines, which are purchased on a competitive basis and in accordance with the requirements of the OIE, and which comply with the certification of the Ministry of Agriculture's centre on the registration and certification of veterinary medicines, feed and feed additives.

Kyrgyzstan cooperates with international donor organizations and institutions to accept MCM and materials. In 2016, Kyrgyzstan signed a memorandum of understanding with the Russian Federation's Federal Service for surveillance on consumer rights protection and human well-being (Rospotrebnadzor), which provides for cooperation with regard to emergency response in accordance with IHR, including the provision of search and rescue teams. There is also an agreement in place in the field of public health and security in the framework of the Commonwealth of Independent States (CIS); this is updated every two years, and was most recently updated in November 2016.

In the event of a public health-related emergency, the Government develops a multi-sectoral action plan; for zoonotic disease relating to public health, a plan of that kind is being developed under the oversight of the National Counter-epidemic and Counter-epizootic Committee. The system was tested operationally during the response to a case of bubonic plague in 2013, when the committee was convened for 24 hours

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in order to initiate response measures. The Republican Centre for Quarantine and Especially Dangerous Infections (under the Ministry of Health) carries out quarterly exercises at regional or district levels on combatting plague and cholera, including the mobilization of personnel and MCM; representatives of all regions and local representatives take part in the exercises. Post-event evaluation is envisaged.

In 2016 Kyrgyzstan developed Guidance on the investigation and response to outbreaks of communicable diseases, which is now in the process of being reviewed and approved at the level of the WHO Regional Office for Europe.

Recommendations for priority actions

- Develop a plan for receiving staff from outside the country's borders to implement emergency response measures, including cooperation on issuing visas and fulfilling other requirements for rapid entry into the country and arrival at the scene.

- Carry out a command team and other operational exercises to test the plan and capacity for the rapid reception and assignment of personnel arriving from abroad.

Indicators and scores

R.4.1 System is in place for sending and receiving medical countermeasures during a public health emergency – Score 5

This score was based on the fact that the country has a functioning internal system for sending and receiving MCM either from national reserves or from external sources, that the distribution of MCM is included in the national emergency response strategy, and the functionality of the system for the MCM deployment has been demonstrated in frequent exercises and real response measures. Links have been established with international donor organizations and establishments able to provide MCM and resources, and a memorandum of understanding was recently signed with the Russian Federation on cooperation in emergency response.

Strengths/best practices

- MCM reserves are maintained: vaccines, medicines, personal protective equipment for medical and veterinary response measures.

- A strategy is in place for MCM provision from abroad, and policies were adopted in 2016 to allow for foreign MCM (in cooperation with the Russian Federation).

- There is an emergencies fund and a system in place for the rapid procurement of additional MCM and other materials. Kyrgyzstan has logistics specialists for procurement and distribution of resources in emergencies, in addition to specialized transportation in the north and south of the country to allow the cold chain to be maintained when MCM are delivered.

- Regular exercises are carried out to improve the health emergency response system, including the deployment of MCM. The National Centre for Quarantine and Especially Dangerous Infections conducts regional exercises on a quarterly basis focusing on plague and cholera, with the participation of regional and local agencies. The measures are subsequently evaluated to reveal and remedy any shortcomings.

Areas that need strengthening/challenges

- Kyrgyzstan does not have the production capabilities for full provision of MCM.

- The provision of veterinary MCM, including medicines and vaccines, necessitates a system of tenders and bids; this means there is no capacity to make as-needed procurements in emergencies or special procurements in small quantities.

R.4.2 System is in place for sending and receiving health personnel during a public health emergency – Score 2

This score is based on the existing system for deploying personnel to respond to health-related emergencies, which is practised regularly and is used to respond to real events, and also on the recently signed memorandum of understanding with the Russian Federation on emergency response coordination and the agreement among CIS countries on health and security. However, there have been no exercises or real-event responses to test the operational procedures for decision-making and protocols.

Strengths/best practices

- Kyrgyzstan has experience of foreign experts providing assistance after earthquakes and other natural disasters, including United Nations personnel; however, United Nations staff have the option of visa-free entry to the country when travelling on a United Nations laissez-passer; these arrangements would not apply to all international medical workers who might be recruited to respond to a health emergency.

Areas that need strengthening/challenges

- No official system has been established for admitting international health workers in health emergencies.

Risk communication

Introduction

Risk communication should be a multi-faceted and multi-level process that aims to help stakeholders define risks, identify hazards, assess vulnerabilities and promote community resilience, thereby promoting the capacity to cope with an unfolding public health emergency. An essential part of risk communication is the dissemination of information to the public about health risks and events, such as outbreaks of disease. To be effective, any communication about risk caused by a specific event must take into account the social, religious, cultural, political and economic aspects associated with the event, as well as the voice of the affected population.

Communications of this kind allow appropriate prevention and control action to be taken through community-based interventions at individual, family and community levels. Making sure that basic information is accessible through the appropriate channels is essential. Communication partners and stakeholders in the country need to be identified, and functional coordination and communication mechanisms should be established. In addition, the timely release of information and transparency in decision making are essential for building trust between authorities, populations and partners. Emergency communications plans need to be tested and updated as needed.

Target

States Parties should have risk communication capacity which is multi-level and multi-faced. There should be real time exchange of information, advice and opinion between experts and officials or people facing a threat or hazard to their survival, health or economic or social well-being so that they can take informed decisions to mitigate the effects of the threat or hazard and take protective and preventive action. It includes a mix of communication and engagement strategies like media and social media communication, mass awareness campaigns, health promotion, social mobilization, stakeholder engagement and community engagement.

Kyrgyzstan level of capabilities

The existing risk communication system is based on a smooth functioning, multi-stage mechanism for the exchange of information on risk and response measures. Personnel designated to work in this area receive regular training and up-to-date information about new techniques for communicating with internal/external partners and the public in general. The Ministry for Emergencies is responsible for a multi-pronged system of communication based on the principles of bottom-up reporting and public involvement. In this way, balanced and rational decisions can be made about risk information and subsequent communications with partners and the public.

Regular meetings with key partners at the national, regional, and international levels are part of a comprehensive approach to communicating and mobilizing support with the aim of overcoming threats and hazards affecting the health and wellbeing of the population. It was reported that there are more than 1000 village health committees that hold monthly meetings to discuss threats and prevention methods and ensure preparedness. In the committees, the local community is well represented, alongside political and religious leaders, nongovernmental organizations (NGO), community workers and United Nations personnel (UN). Information obtained through these meetings is used to ensure the bottom-up flow of communication on risk (to health) and hazards. The same rural structures serve as an initial filter for

managing rumours, fears and anxieties on the ground. Part of this filtering process is active listening. Information on risks and potential hazards is considered in situ.

The main strengths in this area of work are the well-trained teams of communication specialists and, on the front line, the local health committee, which often process information about health hazards and risk factors in real time. Village health committees are an important part of the risk communication mechanism.

Recommendations for priority actions

- Develop a joint strategy on risk communication that involves the Ministry of Health, the Ministry for Emergencies, the Ministry for Agriculture, the veterinary service, and other relevant sectors, including those concerned with agricultural issues and animal health protection, for communication about the various hazards to public health.

- Create a system for operational response to reports from the community of population health issues, through an internet portal or by establishing hotlines.

- Provide village health committees with modern means of communication.

Indicators and scores

R.5.1 Risk communication systems (such as plans and mechanisms) – Score 4

Staff of the Ministry of Emergencies and the Ministry of Health reported a risk communication system for multiple risk factors that works well, with a core team of appropriately trained communication specialists established at the central level. The system is tested regularly through risk communication during potential public health incidents and in real cases. The communications team provides specific support and expertise on sharing information on health risks on the basis of need.

Strengths/best practices

- A risk communication system is established with a multi-sectoral approach that takes into account multiple risk factors.

- Members of the core team of communication specialists regularly undertake training and receive up-to-date information on the risk communication procedures, including cooperation with line ministries.

- Local information about potential threats and follow-up actions is used as training material for the specialist communication teams.

Areas that need strengthening/challenges

- There is insufficient coordination of public health risk communication measures between the Ministry for Emergencies and the Ministry of Health.

- Intersectoral risk communication has not been established as routine practice.

- Risk communication services are offered at a low level.

R.5.2 Internal and partner communication and coordination – Score 4

Staff of the Ministry for Emergencies reported regular meetings with internal and external partners for the purposes of communication about risks and hazards. National stakeholders, State institutions, NGOs and international organizations are invited to work together in briefings for information exchange and coordinated support.

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Strengths/best practices

- A standardized mechanism has been introduced for the regular involvement of internal and external partners on communication issues.

- A risk communication plan is prepared after a specific event and the lessons learnt are used by the partners and interested stakeholders to improve their internal communications.

- All internal partners and external stakeholders are invited to participate in joint meetings on risk communication matters to create an atmosphere of transparency and improve coordination.

Areas that need strengthening/challenges

- There is inadequate coordination of communication with internal and external partners.

- There is poor synchronization between government communication channels and information received from partners.

- There are not enough active discussions with partners about joint communication plans and the joint use of resources.

R.5.3 Public communication – Score 4

Staff of the Ministry for Emergencies and the Ministry of Health reported on the existence and functioning of the team responsible for providing information for use on mass media channels (television, radio and newspapers) and other mechanisms for informing the public. Regional and local conditions, as well as language requirements, are taken into account to achieve the maximum information coverage.

Strengths/best practices

- Communication teams collect and present to the public information on health issues obtained from various sources: Ministry of Health, Ministry of Agriculture, the veterinary service, and also other information sources including village health committees.

- The information prepared by the team is complete and balanced.

- Communication is carried out using various mass media, increasing its population coverage.

Areas that need strengthening/challenges

- There has not been any cooperation developed with mainstream media (television, radio, newspapers) with regard to communication on matters of health.

- Inadequate attention is paid to mechanisms for coordinating the sector-specific communication programmes.

- There have not been any specific information packs developed for communication on specific health issues.

R.5.4 Communication engagement with affected communities – Score 4

Members of the mission were told of a high level of engagement by affected communities on communication matters. Village health committees play an active role, holding monthly meetings and acting as sources of valuable information on health issues. Village health committees consist of representatives of regional organizations, political leaders, administrative officials, and representatives of NGOs, local business, the United Nations and decentralized government structures.

Strengths/best practices

- Village health committees include community representatives and hold regular meetings.

- Information and the results of discussions received from these committees is taken into consideration in government communications on health issues.

- Representatives on village committees are trusted and serve as a point of connection for sending and receiving first-hand information on health issues.

Areas that need strengthening/challenges

- The communication specialists from the Ministry of Emergencies were inadequately represented in the village committees.

- The development of the information technology system for communication between local, regional and central levels is poor.

- There are not enough resources to support the functioning of the village health committees.

R.5.5 Dynamic listening and rumour management – Score 4

National and external members of the JEE mission discussed the commonalities and points of connection between indicators R.5.3, R.5.4 and R.5.5. As a result of this, and taking into account the existence of an effective mechanism for rumour management through the village health committees, it was possible to reach agreement regarding the level of capabilities demonstrated. Two examples were given of village health committees playing a key role in resolving and regulating a hypothetical public health-related incident.

Strengths/best practices

- Rumour management and dynamic listening is part of everyday work at the local and regional level.

- Village health committees are used as the main channel for verifying rumours and communicating risks.

- The evaluation of rumours, the verification of health risks and information about the potential health hazards are taken into account during meetings on risk communication at the central level with internal and external partners.

Areas that need strengthening/challenges

- Once rumours spread, advice on health issues is not trusted.

- Greater attention should be paid to rumours and problems relating to disinformation.

- Unsatisfactory response times to rumours and/or misinformation on health issues.

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OTHER IHR-RELATED HAZARDS AND POINTS OF ENTRY

Points of entry

Introduction

All core capacities and potential hazards apply to points of entry (PoE) and thus enable the effective application of health measures to prevent international spread of diseases. States Parties are required to maintain the core capacities at the designated international airports and ports (and where justified for public health reasons, a State Party may designate ground crossings) which will implement specific public health measures required to manage a variety of public health risks.

> **Target**
>
> *States Parties should designate and maintain the core capacities at the designated international airports and ports (and where justified for public health reasons, a State Party may designate ground crossings) which implement specific public health measures required to manage a variety of public health risks.*

Kyrgyzstan level of capabilities

Kyrgyzstan is landlocked. It has 11 international border crossing points (2 airports, 1 railway station, 8 other ground crossings). Manas Airport (in Bishkek) and two ground crossings from China (Torugart and Irkeshtam) should be considered as points of entry. Bishkek railway station and the ground crossing from Kazakhstan (Ak Shol) are also important hubs for the country, and it is felt that they should also be designated as points of entry. However, the information presented and discussions with national experts have not allowed the mission team to determine which border crossing points are officially designated as points of entry in accordance with WHO rules (International Health Regulations), and which are only treated as official points of entry by the country.

As Kyrgyzstan is a member of the EAEU – alongside Armenia, Belarus, Kazakhstan and the Russian Federation – the legal responsibilities and capabilities that arise as a result of this partnership exert a real influence on the capacities at Kyrgyzstan's PoE. In practice, this means that under the relevant EAEU agreements, capacity requirements are higher at PoE on the borders with States that are not EAEU members (for example, from China) than at border crossings between EAEU member states. There is access at all PoE to the relevant medical services, which have the necessary personnel, equipment and premises for diagnosing and treating the sick, as well as the personnel and equipment to transport sick people to an appropriate medical establishment. Premises are available for verification of potentially contaminated travellers, and animals, but also to allow assessment and quarantine in the event of a suspected infection. Verification programmes have been established to ensure safe environments at PoE, exercising control in relation to communicable diseases at and near PoE.

A comprehensive national plan has been introduced for emergency response at PoE in the event of a public health emergency.

Recommendations for priority actions

- Carry out consultations with WHO on the requirements for PoE designated in accordance with IHR Indicator 1B, in particular to: 1) determine the role and responsibilities provided by the status of designated PoE; and 2) verify whether the capacity at designated PoE complies with EAEU agreements on core capacity requirements in accordance with IHR.

- Create a sustainable training capacity within the country, including for training-of-trainers and work placement programmes.

- Carry out the planned training on the development of an emergency action plan, renew the emergency action plan and publish the lessons learnt as a result of that training.

- Recruit external experts for training and testing of the emergency action plan with the goal of this experience finding practical application.

Indicators and scores

PoE.1 Routine capacities are established at points of entry – Score 4

Access is provided to appropriate medical services for diagnosis and treatment of the sick (with the provision of personnel, equipment and premises) at PoE, as well as access to equipment and personnel for the transport of sick people to the appropriate medical establishment. There is a lack of programmes for verifying the safety of the environment at PoE and disease vector control at and near PoE.

Strengths/best practices

- Demonstrated access to appropriate medical services and the provision of personnel, equipment and premises for diagnosis and care of the sick. Quarantine points have been established in airports.

- Demonstrated access to personnel and equipment for transporting sick people to the appropriate medical establishment.

- There is an inspection programme to ensure secure conditions at PoE and communicable disease control in accordance with EAEU protocols.

Areas that need strengthening/challenges

- Despite access to medical facilities, not all ground crossing points have medical services with the means for diagnosis.

- It has not been shown that the personnel conducting inspections of border resources are properly qualified to evaluate the risk to human health from the means of transport (i.e. there is no assessment of the risk).

PoE.2 Effective public health response at points of entry – Score 3

There is access to resources for examining potentially infected persons and animals, and also resources to evaluate and quarantine persons suspected of having a disease. Comprehensive national plan has been adopted with effective response measures at designated PoE in the event of a public health-related emergency.

Strengths/best practices

- Services for preliminary investigation of potentially affected persons and animals (veterinary service), or access to such services, are available, as well as the means for assessing the condition of and isolating individuals with a suspected disease, thanks to agreements with local medical and health services.

OTHER

- A national action plan for public health-related emergencies has been introduced for public health response at PoE; the plan is approved by national legislation, is integrated with other public health response plans, covers all the relevant sectors and services at PoE, and also extends to key stakeholders.

- Kyrgyzstan's score for its capacity for effective response in the area of public health at PoE reaches 3 points, because the operational response plans at PoE are reviewed every two years; this ensures that response plans are renewed regularly. In addition, a management system has been introduced and there has been an agreement with medical establishments on transportation for the safe transfer of ill persons.

- In 2017, Kyrgyzstan is planning to carry out training on public health-related emergency response.

Areas that need strengthening/challenges

- It was not demonstrated how regularly the strategic national plan on public health emergencies is reviewed and approved, nor how regularly the reports are published with the results of the approval.

- There is no systematic evaluation of the effectiveness of measures taken at PoE in response to public health-related events.

- There is a lack of incentives for the recruitment of specialists to remote regions, for example at ground border crossing points in remote areas; this creates a risk that not all the services needed are provided.

Chemical events

Introduction

States Parties should have surveillance and response capacity for chemical risk or events. This requires effective communication and collaboration between the sectors responsible for chemical safety, industries, transportation and safe disposal.

Target

States Parties should have surveillance and response capacity for chemical risk or events. This requires effective communication and collaboration between the sectors responsible for chemical safety, industries, transportation and safe disposal.

Kyrgyzstan level of capabilities

Management of chemical security in Kyrgyzstan, including chemical events and controlling chemicals in food products, is provided for under the Constitution and all related obligations under legislation, orders and other official documents. The Programme of the Government of the Kyrgyz Republic on the proper management of chemical substances in Kyrgyzstan from 2015–2017, confirmed by Government Decree No. 91 (2015), provides an analysis of the existing situation on the management of chemicals and covers the licensing, transport and storage of chemicals, poisons and chemical waste.

Kyrgyzstan has ratified, by means of laws or decrees, several international conventions, including the Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade (ratified in 2000), the Stockholm Convention on Persistent Organic Pollutants (ratified in 2006), and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (ratified in 1995). National policy and implementation plans have been established in accordance with international requirements. The import and export of chemicals is regulated and a security passport is needed in order to transport chemicals. There are several institutions and departments carrying out various functions and responsibilities in the field of chemicals management.

As of 2012, the State Inspectorate on Ecological and Technical Security, under the Kyrgyz Government, manages chemical safety measures and the implementation of all chemical-related conventions. The Ministry of the Economy is responsible for developing and implementing a unified national policy. The State Agency for Environmental Protection and Forestry, under the Kyrgyz Government, conducts monitoring of environmental pollution and observations of soil and water conditions, and also implements State policy on environmental protection and ecological security.

The Epidemiological Surveillance Department (Ministry of Health) is responsible for control and surveillance of chemical substances affecting human health and, specifically: carries out surveillance of establishments dealing with nutrition matters; conducts surveillance of persons exposed to chemicals in the course of their work; checks workplaces where hazardous chemicals are present; and also conducts investigations into accidents and poisonings and checks for the presence of chemicals in food products. These measures are implemented at the national level, and also at city, regional and district levels. There are trained specialists. Individuals working with hazardous chemicals undergo a medical examination before they are allowed to begin work, and have annual check-ups subsequently. There are toxicological centres with trained staff in cities and in every region.

OTHER

The Department for Chemicalization and the Protection of Plants (Ministry of Agriculture) is responsible for pesticide control; Bishkek and Osh have toxicology laboratories accredited under ISO 17025 to detect pesticides and pesticide residues, especially in vegetables and in water. The same Department is also creating an inventory of the many tonnes of old pesticides (in particular, those held at storage facilities and former collective farms) that can also penetrate into the soil surface. The composition of many of these pesticides is unknown.

Every department maintains its own list of hazardous premises, and enterprises carry out their own tests and have separate and integrated action plans for emergencies that include chemical security aspects. In the event of indicators exceeding the established limits, the department notifies the Ministry of Emergencies, which in turn notifies other relevant agencies including the Ministry of Health, and convenes the Interdepartmental Civil Protection Committee. The Ministry for Emergencies is developing a multisectoral plan of action that provides for the involvement of other ministries and local authorities; the plan is reviewed annually and amended and added to as appropriate. Interdepartmental training is carried out annually with the aim of checking the capacity of the system to respond to emergencies such as chemical spillages. In 2016, 12 drums of an unidentified substance marked "dangerous" were found in a remote region. The committee was accordingly convened, including the district chief medical officer and representatives of all other relevant sectors, in order to identify the chemical substance, dispose of it rapidly and inform the public about risk prevention.

The Epidemiological Surveillance Department has a laboratory wing for chemical analysis, and 15 (out of 50) of its laboratories have been accredited under ISO 17025 and operate nationally. Kyrgyzstan has the capacity to analyse and detect chemical substances, for example to determine the lead content in water. Laboratory services are also accessible in Osh and Kadamjay. In September 2015, these laboratories took part in an external quality control programme in Almaty, the results of which were judged satisfactory.

There is a high turnover of qualified staff, resulting in a constant need for retraining.

National documents on these processes and opportunities were available in Russian only and were not examined in depth.

Recommendations for priority actions

- Examine and update obsolete technical regulations and methodological documents.
- Strengthen national potential for rapid identification of unidentified chemicals and contaminants.
- Identify opportunities to extend and strengthen cooperation, communication and professional collaboration within and between departments.
- Develop and update a standard comprehensive list or carry out mapping of chemical hazards in the country and disseminate this information among all relevant agencies.
- Conduct practical training on responding to chemical events.

Indicators and scores

CE.1 Mechanisms are established and functioning for detecting and responding to chemical events or emergencies – Score 5

All the core capacities are established or described in legislative acts, orders and other documents. Capabilities have been tested during at least one recent event.

Strengths/best practices
- Thorough monitoring of the environment and of individuals potentially affected by the effects of hazardous chemicals.

- Strict monitoring of potentially hazardous chemicals in the environment and monitoring of known sites and commercial enterprises.

- The existence of toxicology centres.

Areas that need improvement/challenges

- No national exhaustive list of existing chemical hazards and threats.

- No capability for identification of unknown chemical substances.

- No regular information sharing and insufficient coordination of technical activity.

- National monitoring of harmful and hazardous chemicals remains inadequate.

CE.2 Enabling environment is in place for management of chemical events – Score 5

Existing legislation facilitates the management of chemical events at national level.

Strengths/best practices

- The management of chemical safety and response to chemical events is based on extensive legislation and other official documents.

- By Government decree, the lead agencies responsible for managing chemical safety issues are designated by the State Agency for Environmental Protection and Forestry.

- The Ministry for Emergencies convenes all the relevant institutions and departments in relation to an event, on the basis of a plan that is renewed annually.

- Training is conducted every year, but operational interdepartmental capacity was tested during an event in 2016, when a problem with barrels of unknown chemicals was resolved effectively.

Areas that need strengthening/challenges

- Some of the fundamental technical regulations and procedural documents are outdated.

OTHER

Radiation emergencies

Introduction

Control over radiation emergencies requires prompt detection and effective response to potential radio-nuclear hazards/events/emergencies and cooperation between the sectors responsible for managing radio-nuclear emergencies.

Target

States Parties should have surveillance and response capacity for radio-nuclear hazards/events/emergencies. This requires effective communication and collaboration among the sectors responsible for radio-nuclear management.

Kyrgyzstan level of capabilities

All obligations on the management of radiation and nuclear safety and emergency response in Kyrgyzstan are described in a large body of laws, orders and other official documents. In accordance with legislation adopted in 2012, the State Inspectorate on Ecological and Technical Security, under the Kyrgyz Government, is the regulatory body on radiation safety. The department coordinates cooperation with the Ministry of Health's Epidemiological Surveillance Department and the five other competent State bodies responsible for radiation security (including the Ministry of Emergencies). Regulations have been issued describing the procedure for cooperation between agencies in emergencies and on routine measures, including border controls, and also providing for joint activity to be carried out, up to and including district level. Some strategies and orders relating specifically to emergency response still date from Soviet times and should be adapted to today's conditions. Issues relating to radiation contamination are funded from within State budgets. During the past five years there have been no serious radiation emergencies.

As well as acting as the regulatory body, the State Inspectorate for Ecological and Technical Safety is also responsible for carrying out surveillance and monitoring of sectors where radiation equipment is used (for example, in the mining industry), and has the power to impose fines. It coordinates cooperation with the International Atomic Energy Agency (IAEA). Thresholds for radiation exposure are established by legislation. The State Inspectorate does not have laboratories, but it does possess portable measuring equipment to monitor industrial premises. This agency monitors and is responsible for 90 identified radioactive tailing sites at closed uranium mines (60 of which have been recognized as hazardous), carries out routine and spot checks of water quality and residential and other buildings. If required, the State Inspectorate may avail itself of the laboratories of the State Epidemiological Surveillance Department for soil and water testing.

The Ministry of Health's lead department responsible for radiation safety issues is the Radiation Safety Division of the Epidemiological Surveillance Department. It has responsibility for surveillance and monitoring of medical establishments that use x-ray machines and radiotherapy equipment; it also monitors 137 types of food product and controls the quality of drinking water. The Department studies proposals for the performance of potentially hazardous work and gives authorization for such activities, although licensing per se is the responsibility of the Ministry of the Economy. Moreover, the Department cooperates closely with the State Agency for Architecture, Construction and Housing to ensure the safety of building materials. The country maintains a register of radiological sources. Training was last carried out in the Ministry of Health in May 2015.

OTHER

The Radiation Safety Division of the Epidemiological Surveillance Department is also responsible for monitoring personnel. Records are kept of personnel working with hazardous substances, and medical examinations are compulsory before starting work and annually thereafter. A private laboratory in Chui district provides services to support dosimetric monitoring of personnel in risk groups nationwide, and also furnishes information and analysis on a quarterly basis to the Epidemiological Surveillance Department, which implements response measures and follow-up action and consults with personnel as required. The personnel involved in the project to relocate radioactive tailings will be rigorously monitored.

In Bishkek, Osh and Mailuu-Suu, the Epidemiological Surveillance Department has regional level laboratories and radiological sections. Bishkek has equipment for carrying out dosimetrical and radiometric investigation of the environment, which is accredited under ISO 17025. An evaluation was carried out both at national level and with external partners (for example, with representatives from Belarus and the Russian Federation) of the quality of laboratory investigations, especially food and water analysis, and the results were found to be satisfactory.

The National Centre for Oncology, Haematology and Occupational Illness has responsibility for the examination and treatment of persons affected by radiation exposure, including from the Chernobyl accident. These official functions extend right down to regional level. There are also mobile hospitals for providing treatment at high altitude and in remote areas (for example, at mine tailings). At PoE, the State Customs Service, the State Border Service and the Epidemiological Surveillance Department of the Ministry of Health have joint responsibility for the movement of people and materials. Within the framework of CIS, agreements have been signed on the transport of radioactive materials. There have been at least two cases of radioactive materials entering the country; these issues were resolved satisfactorily.

Kyrgyzstan has ratified the 1979 Convention on the Physical Protection of Nuclear Material and is a State party to the IAEA's Treaty on the Non-Proliferation of Nuclear Weapons.

Although initial training is conducted in the Medical Academy, and some sessions of additional specialist training have been organized by IAEA, Kyrgyzstan does not have any training centres and there are no opportunities for training specialists abroad.

National documentation relating to these procedures and opportunities was only available in Russian and was not examined in depth.

Recommendations for priority actions

- Organize technical training and develop course programmes in accordance with IAEA requirements.

- Ensure all interested industries and establishments make a technical contribution to the current process of planning activities for relocating tailing storage facilities.

- Analyse and renew the outdated basic technical protocols and training documents.

- Study the experiences of model countries on the coordination and reclamation of tailing ponds.

- Ensure that individuals located near remote alpine tailings are examined (for example, using mobile laboratories).

Indicators and scores

RE.1 Mechanisms are established and functioning for detecting and responding to radiological and nuclear emergencies – Score 5

Plans have been developed and mechanisms established for checking and monitoring the level of exposure of people, materials and premises, and also for emergency response. Joint measures are carried out and mechanisms for information sharing have been implemented.

OTHER

Strengths/best practices

- There are laboratories and mobile equipment for screening and monitoring of the environment, materials, food products and personnel.

- Partners (Belarus, IAEA, the Russian Federation) are providing technical support.

- National capability to detect radioactive materials entering the country has been demonstrated by several events.

- The relevant ministries carry out joint checks at district level on the basis of need.

- The urgent introduction of a strict control system for allocating work with hazardous materials.

- Careful controls are exercised over personnel working with hazardous materials.

- There is a mobile hospital for treatment at high altitudes and in remote districts.

Areas that need strengthening/challenges

- Kyrgyzstan does not have training centres on radiation safety and there are few opportunities for staff training abroad.

- Some equipment is outdated.

RE.2 Enabling environment is in place for management of radiation emergencies – Score 5

Kyrgyzstan has a large number of plans and legal documents regulating all aspects of national radiation safety and emergency response, including a policy setting out the procedure for routine and emergency information sharing.

Strengths/best practices

- Broad national legislation, orders and other official documents regulate activities connected with detection of and response to radiation emergencies.

- Core international conventions have been ratified.

- Coordination between institutions is regulated by appropriate instruments down to district level.

Areas that need strengthening/challenges

- Some of the strategies and orders, particularly those on emergencies, are outdated.

Appendix 1. Background information about the JEE

Mission place and dates

Bishkek, Kyrgyzstan, from 28 November to 2 December 2016.

Mission team members

- Elizabeth Mumford, WHO headquarters, Geneva, Switzerland (team lead)

- Peter Mertens, Expert on IHR, appointed by the Government, the Netherlands (co-team lead)

- Vasily Esenamanov, WHO Regional Office for Europe, Copenhagen, Denmark

- Jerker Jonsson, Public Health Agency, Sweden

- Astrid Milde-Busch, Robert Koch Institute, Germany

- Joanna Zwetyenga, laboratory specialist, Burkina Faso

- Sean Shadomy, Food and Agricultural Organization of the United Nations, Rome, Italy.

Objective

To evaluate Kyrgyzstan's capacities and capabilities in relation to the 19 technical areas of the IHR JEE tool to provide baseline data with the aim of supporting Kyrgyzstan's efforts to reform and improve public health security.

The JEE process

The JEE is a peer-to-peer review. As such, it is a collaborative effort between host country experts and external evaluation team members. The entire external evaluation, including discussions around the scores, the strengths, the areas which need strengthening, best practices, challenges and the priority actions, should be collaborative, with external evaluation team members and host country experts seeking full agreement on all aspects of the final report findings and recommendations.

Preparation and implementation of the mission

After receiving Kyrgyzstan's request to conduct a JEE mission and agreeing the timeframe, the WHO Regional Office for Europe, the WHO Country Office in Kyrgyzstan, and the JEE Secretariat at WHO headquarters worked together with the aim of letting all the relevant government institutions and nongovernmental organizations in the country know about the mission promptly. They also worked together to determine the composition of the JEE mission team and (in cooperation with the Ministry of Health, the National Coordinating Centre on IHR and National Offices on JEE) develop the mission programme, including visits to premises. The JEE tool, the self-assessment document, and also templates for presentations (in Russian) were sent to the national team with recommendations and a list of questions that would be asked during the mission.

For logistical reasons, teleconferences between the mission lead, mission co-lead and external JEE team did not take place. However, the team was informed by email about the responsibilities and sent the relevant documents, including responses regarding the results of some earlier evaluations. The WHO Country Office team took on the role of organizer and provided logistical support, including organizing mission visits and the translation of documents.

The day before the mission, a Sunday, the mission lead carried out a multilateral briefing for the team, on the IHR monitoring and evaluation framework, JEE principles and methods, organization of sessions and awarding of scores; in the course of the briefing, questions were raised about what was expected in the quality of the results of the plenary sessions, and also about which data had to be included in the report. Oskon Moldokulov and Almaz Sartbaev (the coordinators from the WHO Country Office) also attended this briefing and presented information about the country context and logistical issues.

On Monday and on Friday morning there were two meetings between the JEE team and the WHO Representative in Kyrgyzstan, Jarno Habicht. On Thursday afternoon the mission leader, Oskon Moldokulov and Sean Shadomy met with the United Nations resident representative Alexander Avanessov and the representative of the United Nations Office for the Coordination of Humanitarian Affairs Ms. Jypar Myrzanalieva.

JEE sessions and the wrap-up meeting

The mission was conducted from Monday to Friday. From Monday to Wednesday, the external members of the JEE team, the national JEE coordinators and participants from the national institutions responsible for technical areas (see list below), met in plenary sessions in the Golden Tulip Hotel in Bishkek. These sessions covered all technical areas except for accountability and risk communication, which were considered on Friday morning.

On Friday, after discussion of the technical areas the whole group participated in a review of the scores and priority actions for all 19 technical areas. These evaluations and priority actions were agreed without further discussion. In the second half of the day, the experts from Kyrgyzstan, external JEE team members and the WHO Representative in Kyrgyzstan welcomed Director Oleg Gorin, deputy Minister of Health and Chief Medical Officer of the Kyrgyz Republic, and the team lead presented general information about the mission and the final results. The JEE process was discussed, the results and the next steps needed to close the gaps revealed during the evaluation. Following this discussion, the WHO Representative in Kyrgyzstan officially closed the meeting.

Visits to technical facilities

The WHO Country Team organized and provided assistance with visits to the following technical facilities on Thursday, 1st December. An interpreter was provided.

Visit 1 (Astrid Milde-Busch and Peter Mertens)

- Sanitary-quarantine point at Manas airport (Bishkek);
- Sanitary-quarantine point at Osh airport (Osh).

Visit 2 (Vasily Esenamanov, Jerker Jonsson, Elisabeth Mumford, Sean Shadomy)

- Government of the Kyrgyz Republic, Department of Social Development;
- Republican Clinical Infection Hospital.

Visit 3 (Vasily Esenamanov, Jerker Jonsson)

- Bishkek Centre for State Sanitary-Epidemiological Surveillance;
- The Emergency Operations Centre of the Ministry for Emergencies;
- The Department for the Prevention of Disease and State Sanitary and Epidemiological Surveillance.

Visit 4 (Elizabeth Mumford, Sean Shadomy):

- Ministry of Agriculture, Department for Food Safety;
- State Inspectorate on Veterinary and Phytosanitary Security;
- Republican Centre for Veterinary Diagnosis and Expertise.

Self-assessment evaluation, presentations and interpretations

The results of the national JEE self-assessment had not been submitted by the mission start-date. The sections of the self-assessment survey, completed in Russian, and the presentation prepared by national officials were sent by the Ministry of Health to the WHO Country Office for translation into English and subsequent dissemination to the members of the JEE team. These documents were not available to the JEE team in English during the week that the JEE mission took place, and were only received during the following two weeks; some sections have still not been submitted. In almost all the technical areas the answers to some or all of the questions in the self-assessment were included in the corresponding presentation on the technical area presented by experts from Kyrgyzstan; these presentations were in Russian and only some of the PowerPoint presentations had been translated in English. The interpretation from Russian limited the JEE team's understanding of the material. Technical terms and the names of institutions were not always understood or were used by the interpreter in an inconsistent manner. Despite attempts to clarify, it is likely that the JEE team members did not fully understand the system or the situation due to the interpretation of the presentations given by the experts from Kyrgyzstan; nor was the interpretation during the discussions always helpful. It was also noted that the English-to-Russian translation of the standard JEE Tool used in the discussions with the Kyrgyz experts during the plenary sessions was not always accurate, which was an additional barrier to effective discussion.

Limitations and assumptions

- The evaluation took place over a period of one week, which limited the quantity and detail of the information that could be processed.
- It is assumed that the results of this evaluation will be widely disseminated.
- This evaluation is not an audit. The JEE is an expert evaluation. The information presented by Kyrgyzstan was not subject to independent verification, but it was discussed and the resulting scores were decided upon by mutual agreement between the representatives of the host country and the JEE team.
- This evaluation does not include any assessment of the quality of processes but, rather, relates to the system components required for implementation of IHR at the country level.

Key host country participants and institutions

IHR National focal point: Tolo Isakov, Director of the Department for Disease Control and National Health and Epidemiological Surveillance (Epidemiological Surveillance Department), Ministry of Health of the Kyrgyz Republic.

Lead representative of Kyrgyzstan: Asilbek Sidikanov, Deputy Director of the Department for Disease Control and National Health and Epidemiological Surveillance, Ministry of Health of the Kyrgyz Republic.

Participating institutions:

- National Centre for Quarantine and Especially Dangerous Infections Checkpoint, Manas airport
- National Centre for Quarantine and Especially Dangerous Infections Checkpoint, Osh airport
- Customs Control of the State Customs Service

- Department for Customs Infrastructure Development, State Customs Service.

- Department of State Veterinary Control, Veterinary Inspectorate.

- Epidemiological Surveillance Department, Ministry of Health.

- Office for Animal Health Protection, Veterinary Inspectorate.

- Office for Epidemiological Surveillance, National Centre for Quarantine and Especially Dangerous Infections.

- Department for Food Safety Control, Epidemiological Surveillance Department.

- Manas and Osh airport polyclinics, Ministry of Transport.

- Kyrgyz State Medical Academy.

- Legal Department of the Epidemiological Surveillance Department.

- Ministry for Emergencies.

- Profmeditsnia (nongovernmental organization).

- National Applied Research Centre for Quality Control of Laboratory Diagnosis of Communicable Diseases.

- Department of Nuclear and Radiation Safety, State Inspectorate for Ecological and Technical Safety.

- Regional office of the Epidemiological Surveillance Department, Osh

- National AIDS Centre

- National Immunoprophylaxis Centre

- National Infection Control Centre

- National Centre for Quarantine and Especially Dangerous Infections

- National clinical infection hospital

- National Centre for Health Strengthening

- State Inspectorate for Veterinary and Phytosanitary Security, Veterinary Inspectorate

Supporting documentation provided by Kyrgyzstan

- National level presentation: "Implementation of the International Health Regulations (IHR) in Kyrgyzstan" (JEE Mission, December 2016, prepared by the Ministry of Health).

- Independent review of the "Den Sooluk" programme and the midterm review support programme (2016, prepared by an independent group of review experts, Jan Anderson, team lead).

- Interdepartmental Plan for Humanitarian Emergency Preparedness and Response (2014, prepared by the Interdepartmental technical working group to develop an emergency preparedness plan).

- Assessment of Health System Preparedness for Emergencies: Kyrgyzstan (2009; updated in December 2012, prepared by the WHO Regional Office for Europe).

- The International Health Regulations (IHR, 2005). Evaluation and analysis of core capacities: Kyrgyzstan (2012, prepared by WHO Regional Office for Europe)

- PowerPoint presentation by Kyrgyzstan: JEE national self-assessment on the 19 technical areas of the JEE Tool

National legislation, policy and financing

- Oral presentation by Kyrgyzstan during the plenary sessions (in Russian with English interpretation);

- PowerPoint presentation by Kyrgyzstan: "Republic of Kyrgyzstan. Joint External Evaluation: National legislation and policy" (in English);

- "The progress of implementation of the International Health Regulations (IHR) in Kyrgyzstan" (in English);

The Kyrgyz participants made reference to the following documents during the mission (although not all documents were available to allow familiarization).

EAEU legislation:

- Treaty on the Eurasian Economic Union of 29 May 2014;

- Technical regulations of the EAEU (establishing food safety requirements);

- Agreements adopted within the framework of the EAEU.

Agreements to which Kyrgyzstan has acceded:

- Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade of 10 September 1998;

- Stockholm Conventions on Persistent Organic Pollutants of 22 May 2001;

- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal of 22 March 1989;

- The Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, and the Cartagena Protocol on Biosafety to the Convention on Biological Diversity (Montreal, 29 January 2000);

- Agreement on cooperation between Member States of the EAEU to control communicable diseases.

- Decision of the Integration Committee of the EAEU - 1330 of 9 December 2011.

Laws of the Kyrgyz Republic on:

- Protection of the health of citizens in the Kyrgyz Republic (No. 6 of 6 January 2005);

- Organization of health care in the Kyrgyz Republic (No.116 of 13 August 2004);

- Public Health (No. 248 of 24 July 2009);

- Protection of the Public from Tuberculosis (No. 65 of 18 May 1998);

- HIV/AIDS in the Kyrgyz Republic (No. 149 of 13 August 2005);

- Immunization against communicable diseases (No. 56 of 26 June 2001);

- Drinking water (No. 33 of 25 March 1999);

- Protection of the population and territory from natural or manmade emergencies (No. 45 of 24 February 2000);

- Technical regulations on Radiation Safety (No. 224 of 29 November 2011);

- Plant quarantine (No. 02 of 12 January 2015 and No. 26 of 27 June 1996);

- Veterinary medicine (No. 175 of 30 December 2014);

- Protection of the environment (No. 53 of 16 June 1999);

- Air protection (No. 51 of 12 June 1999);

- Ecological expertise (No. 54 of 16 June 1999);

- Manufacturing and Consumer Waste (No. 89 of 13 November 2001);

- Food security of the Kyrgyz Republic (No. 183 of 4 August 2008);

- Prevention of iodine-deficiency disorders (No. 40 of 18 February 2000) and the Act introducing amendments and addenda (No. 113 of 13 June 2005);

- Introducing amendments and addenda to Kyrgyz legislation on the fortification of baking flour (No. 54 of 12 March 2015).

National programmes and strategies:

- "Concept and Strategy for comprehensive security of the population and territory of Kyrgyzstan in emergencies and disaster situations until 2020", approved by Governmental Decree No. 357 of 2 June 2012.

- National Programme for reform of the health system "Den Sooluk" for the period 2012-2016, approved by Governmental Decree No. 309 of 24 May 2012;

- Strategy for protection and strengthening the health of the people of the Kyrgyz Republic up to 2020 ("Health 2020"), approved by Governmental Decree No. 306 of 4 June 2014;

- Programme on alerts to the occurrence of local transmission of malaria in the Kyrgyz Republic for 2014-2018, approved by Governmental Decree No. 427 of 31 July 2014;

- Immunoprophylaxis for 1996-2000, the first national programme approved by Governmental Decree No. 328 of 16 May 1994; as well as the second and third programmes in 2001 and 2006, realised in 2001-2005 and 2006-2010 respectively. The immunoprophylaxis for 2013-2017 programme, approved by Governmental Decree No. 47 of 1 February 2013;

- State Programme on stabilization of the HIV epidemic in the Kyrgyz Republic for 2012-2016, approved by Governmental Decree No. 867 of 29 December 2012;

- Programme on prevention and control of noncommunicable diseases in the Kyrgyz Republic for 2013-2020, approved by Governmental Decree No. 597 of 11 November 2013;

- Programme for food security and nutrition in the Kyrgyz Republic 2015–2017, with its implementation plan, approved by Governmental decree No. 618 of 3 September 2015;

- Programme of the Government of the Kyrgyz Republic on proper handling of chemical substances in the Kyrgyz Republic 2015-2017, approved by Governmental Decree No. 91 of 2 March 2015.

Government decrees on:

- The establishment of the National Anti-epidemic and Anti-epizootic Emergency Commission by the Government of the Kyrgyz Republic (Decree No. 152 of 16 March 2010);

- The Coordinating Council on Public Health under the Government of the Kyrgyz Republic (Decree No. 352 of 26 June 2014);

- The authorized body for sanitary/epidemiological welfare of the population of the Kyrgyz Republic (Decree No. 568 of 2 October 2014);

- Measures to streamline the operation of entry points at national borders of the Kyrgyz Republic, targeted at international road, air and rail connections, and internal fixed checkpoints of the Kyrgyz Republic (Decree No. 556 of 19 November 2007);

- Approval of the policy on procedure for sanitary/epidemiological surveillance (control) of persons, modes of transport, goods and cargoes, at the national borders of the Kyrgyz Republic (Decree No. 580 of 7 October 2014);

- Approval of the policy on radiation control at points of entry on the national borders of the Kyrgyz Republic (Decree No. 674 of 26 October 2011);

- Approval of guidelines on reporting of communicable diseases in the Kyrgyz Republic (Decree No. 583 of 23 September 2011);

- Approval of instructions for Infection control in health institutions of the Kyrgyz Republic (Decree No. 32 of 12 January 2012);

- Strengthening cooperation between ministries and departments in combating quarantinable and especially dangerous infections, and also parasitic diseases (Decree No. 297 of 10 June 2011);

- Strengthening the normative regulations in the public health laws of the Kyrgyz Republic (Decree No. 225 of 16 May 2011);

- Epidemiological surveillance to ensure the epidemiological welfare of the population by the public health bodies and institutions of the Kyrgyz Republic (Decree No. 329 of 6 June 2003);

- Approval of the list of imported goods subject to phytosanitary and sanitary-epidemiological surveillance when crossing the State border of the Kyrgyz Republic. (Decree No. 206 of 1 April 2009);

- Approval of the policy on the procedure for conducting State surveillance (Decree No. 702 of 27 September 2006);

- Implementation of the Act of the Kyrgyz Republic on "The prevention of iodine-deficiency disorders" (Decree No. 6 of 9 January 2001).

- Regulatory Decree No. 129-r of 11 October 2010 and No. 96-r of 19 March 2013, implementing the Act on the Fortification of Baking Flour.

- Approval of the food safety and nutrition programme in the Kyrgyz Republic for 2015-2017 (with a plan of measures for implementation of the programme by the Government of the Kyrgyz Republic) (Decree No. 618 of 4 September 2015);

- Approval of risk assessment criteria for use in the implementation of entrepreneurial activity (Decree No. 108 of 18 February 2012);

- Approval of the regulations on the risk assessment criteria for use in scheduled checks on businesses at facilities deemed of high epidemiological risk (Decree No. 679 of 26 September 2011).

Orders of the Ministry of Health of Kyrgyzstan on:

- Guidelines on monitoring and evaluation of infection control in healthcare organizations (Order No. 214 of 28 March 2016);

- Approval of the procedure for prompt alert of healthcare organizations and implementation of urgent organizational measures in the event of the appearance or suspicion of quarantinable disease (including the elimination of Ebola, bird flu, SARS) (Order No. 483 of 12 August 2015);

- Approval of the procedure for prompt alert of healthcare organizations and implementation of urgent organizational measures on suspicion of quarantinable disease" (Order No. 404 of 18 June 2014);

- Improvements to the system for epidemiological surveillance of communicable and parasitic diseases in the Kyrgyz Republic (Order No. 610 of 26 November 2008);

- Epidemiological surveillance of Ebola fever in the Kyrgyz Republic (Order No. 176 of 10 April 2015);

- Measures to prevent the introduction and spread of coronavirus (Middle East respiratory syndrome – MERS) on the territory of the Republic. (Order No. 366 of 30 June 2015).

- On measures to prevent incidence of hepatitis viruses in the Kyrgyz Republic (Order No. 488 of 1 July 2009);

- Modifications to Order No. 655 of the Ministry of Health of the Kyrgyz Republic of 18 September 2009 on "Approval of the composition of the premix for the enrichment of baking flour" (Order No. 598 of 12 October 2013);

- Measures to prevent viral hemo-contact infections in healthcare organizations of the Kyrgyz Republic (Order No. 114 of 13 March 2015);

- Improving the measures to combat bacterial meningitis in the Kyrgyz Republic (Order No. 212 of 28 April 2015);

- Improving the quality management system in healthcare organizations of the Kyrgyz Republic (Order No. 454 of 4 August 2015);

- Methodological guidelines on the Investigation of food poisoning cases. Decision of the Chief Medical Officer of the Kyrgyz Republic No. 33 of 23 July 2003.

IHR coordination, communication and advocacy

- PowerPoint presentation by Kyrgyzstan: "Progress on Implementation of the International Health Regulations (IHR) in Kyrgyzstan" (in English).

Zoonotic diseases

- PowerPoint presentation: "Measures for Epidemiological Surveillance of Zoonotic infections on the territory of the Kyrgyz Republic" (in English).

- The Second Strategy for the Development of Veterinary Services in the Kyrgyz Republic up to 2021.

- Organizational structure of the State Inspectorate on Sanitary, Veterinary and Phytosanitary Security (the Veterinary Inspectorate) of the Kyrgyz Republic.

- Final evaluation report: Veterinary Services of the Kyrgyz Republic, January 2007; IOE, 22 February 2007.

Food safety

- PowerPoint presentation by Kyrgyzstan: "The process of introducing the International Health Regulations in Kyrgyzstan" (in English)

- Final Evaluation Report: Veterinary services of the Kyrgyz Republic, January 2007; Final Evaluation Report: OIE, 22 February 2007.

Immunization

- Joint national-international review of the National Immunization Programme in Kyrgyzstan, 25 July-3 August 2016.

National laboratory system

- Ministry of Health Decree No. 18 of 16 January 2015 on Approval of the Laboratory Coordination Council by the Ministry of Health of the Kyrgyz Republic.

- Ministry of Health Decree No. 347 of 20 May 2016 on Approval of a national policy and strategic plan for the development of laboratory services in the health care system of the Kyrgyz Republic.

Real-time surveillance

- List of notifiable diseases.

- Examples of the monthly bulletins in which aggregated reporting data on diseases is presented with comparisons to the same period of the previous year.

Preparedness

- Evaluation of health system preparedness for crisis situations.

- Evaluation of emergency preparedness of health systems (WHO-EURO, October 2009, renewed in December 2012) with reference to:

    - Ministry of Health Order No. 81 on "Increasing the preparedness of executive offices and health organizations of the medical service of the national civil protection authority against the threat and occurrence of emergencies and disasters" of 22 February 2012;

    - Government Decree No. 475 on "Approval of the Policy on the National System of Civil Protection" of 22 August 2011.

- "Strategic Framework for comprehensive security of the population and territory of Kyrgyzstan in emergencies and disasters in the period to 2020", approved by Government Decree No. 357 of 2 June 2012.

Emergency response operations

- Concept and Strategy for comprehensive security of the population and territory of Kyrgyzstan in emergencies and disaster situations until 2020, approved by Government Decree No. 357 of 2 June 2012.

Linking public health and security authorities

- Government Decree No. 404 on "Approval of the model regulation for cooperation between State bodies of executive power in the realization of related responsibilities", of 9 July 2013.

Points of entry

- The Manas programme in Bishkek for control of communicable diseases in airports.

- The Manas airport action plan on public health-related emergencies (Bishkek).

- The Osh airport action plan on public health-related emergencies.

Chemical events

- "Concept and Strategy for comprehensive security of the population and territory of Kyrgyzstan in emergencies and disaster situations until 2020", approved in Government Decree No. 357 of 2 June 2012 (in Russian).

- Act on Environmental Protection (version dated 16 June 1999, with amendments and addenda dated 25 July 2016) (in Russian).

- Governmental Decree No. 91 of 2 March 2015 on Approval of the Programme of Government of the Kyrgyz Republic on the proper management of chemical substances in the Kyrgyz Republic 2015–2017 (in Russian).

Radiation emergencies

- Concept and Strategy for Comprehensive Security of the Population and Territory of Kyrgyzstan in Emergencies and Disaster Situations until 2020, approved in Government Decree No. 357 of 2 June 2012 (in Russian).

- Technical regulations on radiation security, law of 3 November 2011 (in Russian).

- Environmental Protection (law, version dated 16 June 1999 with amendments and addenda dated 25 July 2016) (in Russian).