

Implementation of the International Health Regulations (2005)

Report by the Director-General

1. In resolution WHA61.2, the Health Assembly decided that States Parties to the International Health Regulations (2005) and the Director-General shall report to the Health Assembly on the implementation of the Regulations annually. In resolution WHA65.23 the Health Assembly requested the Director-General to report on progress made by States Parties and the Secretariat in implementing this resolution.

2. This report gives an account of key actions taken by the Secretariat within the framework of the Regulations in response to Middle East respiratory syndrome coronavirus (MERS-CoV), the second event (after the 2009 H1N1 influenza virus pandemic) for which an Emergency Committee has been convened under the Regulations. The report also describes the process of consultation with Member States on the criteria to be used by the Director-General when making decisions about the granting of extensions to the target date by which States Parties shall develop, strengthen and maintain core capacities as set out in Articles 5 and 13 of the Regulations. Further, the report summarizes information received by the Secretariat regarding implementation of the Regulations by States Parties in 2013. It also gives an account of activities undertaken by the Secretariat under the areas of work for implementation established in 2007.¹ One of those areas of work concerns systematic management of specific risks, including those posed by yellow fever; in the light of recent recommendations by the Strategic Advisory Group of Experts on immunization, a draft resolution to update Annex 7 of the International Health Regulations (2005) is submitted for the Board's consideration.

SECRETARIAT ACTIONS IN RESPONSE TO MIDDLE EAST RESPIRATORY SYNDROME CORONAVIRUS

3. Following the emergence of a novel coronavirus in 2012 (since named Middle East respiratory syndrome coronavirus (MERS-CoV)), the Secretariat has been working closely with Member States, National IHR Focal Points and partners to monitor and respond to the epidemic within the framework of the Regulations. The Secretariat has played a highly visible role in the provision of information, risk assessments and guidance. The WHO Regional Office for the Eastern Mediterranean has been heavily involved in all MERS-CoV activities.

¹ International Health Regulations (2005): Areas of work for implementation. Geneva: World Health Organization; 2007 (document WHO/CDS/EPR/IHR/2007.1, http://www.who.int/ihr/area_of_work/en/index.html, accessed 21 November 2013).

4. The Secretariat has provided direct support to Member States, particularly for investigating new cases and enhancing surveillance and laboratory practices, biorisk management and sampling procedures, and infection prevention and control, and in the form of training and guidance for clinical management of MERS-CoV infections and suspected cases. Since the beginning of the epidemic, the Secretariat has deployed missions to countries in order to support ministries of health in the investigation of the epidemic and the development and adaptation of protocols and response plans for MERS-CoV, in the context of building sustainable alert and response capacities under the Regulations.

5. The Secretariat is facilitating global surveillance of MERS-CoV for early detection of changes in the epidemiology of the virus and for investigation and reporting of cases, and it continues to make global risk assessments and information rapidly available through the Event Information Site for National IHR Focal Points, Disease Outbreak News, press releases and other reports. The Secretariat has also regularly updated guidance on international travel and health, including specific advice and information for the Umrah and Hajj pilgrimages, as well as advice on surveillance for countries to which pilgrims would return.

6. The Secretariat is committed to collaborative investigation and management of the MERS-CoV epidemic and has been working closely with affected Member States, partners at the human–animal interface, including the Food and Agriculture Organization of the United Nations (FAO) and the World Organisation for Animal Health (OIE), and through other collaborative mechanisms such as the International Food Safety Authorities Network. The Secretariat continues to share information with partners in order to optimize surveillance and risk assessments and to enhance preparedness and response.

7. The Secretariat has coordinated technical networks and the Global Outbreak Alert and Response Network, to provide Member States with access to additional international resources. In January and June 2013, the WHO Regional Office for the Eastern Mediterranean hosted consultative meetings of health experts and public health researchers on MERS-CoV. Scientific findings were made available through public web updates, expert networks, and published literature summaries and updates. In June 2013, participants in an intercountry meeting also hosted by the Regional Office made recommendations on surveillance and response, mass gatherings, clinical management, laboratory capacity, infection prevention and control, media and risk communication, and implementation of the International Health Regulations (2005).

8. The Regulations have provided the legal framework for management of the response to MERS-CoV. For the second time since their entry into force in June 2007, the Director-General has convened an Emergency Committee to provide her with advice on key questions relating to the event, including whether it constitutes a public health emergency of international concern, and on any health measures that may be required to respond effectively to the event. The Emergency Committee has met on three occasions since July 2013¹ and a fourth meeting is scheduled to take place before the end of 2013. Following information and deliberations at the first three meetings, the Committee advised the Director-General that the conditions for a public health emergency of international concern had not yet been met. The Director-General agreed with the advice of the Committee. The Committee also provided the Director-General with public health advice emphasizing the importance of strengthening surveillance, continuing to increase awareness of and effective risk communication concerning MERS-CoV, supporting countries that are particularly vulnerable, increasing relevant diagnostic

¹ WHO statements on MERS-CoV. In: IHR Emergency Committee concerning Middle East respiratory syndrome coronavirus (MERS-CoV) [website]. Geneva: World Health Organization; 2012 (http://www.who.int/ihr/ihr_ec_2013/en/index.html, accessed 21 November 2013).

testing capacities, continuing with investigative work and timely sharing of information in accordance with the Regulations, and ongoing active coordination with the Secretariat.

PROPOSED CRITERIA FOR THE GRANTING OF EXTENSIONS IN 2014-2016

9. The Executive Board at its 132nd session considered the criteria proposed by the Secretariat to be used by the Director-General when deciding on requests for extensions to the target date by which States Parties shall implement the core capacities under the Regulations for the period 2014–2016.¹ The Executive Board noted that there were no objections to the proposed criteria but that they would benefit from further consideration by Member States at WHO regional committee sessions in 2013, with the final criteria to be provided to the Executive Board at its 134th session. At the regional committee sessions, Member States in general were supportive of the criteria but made some further suggestions, including that requests for extensions could be submitted up to two months rather than four months before the deadline in June 2014,² and that a criterion be included requiring consideration of the advice from the Review Committee for the International Health Regulations (2005), which is already part of the process to decide on extension requests. The potential for the Review Committee to give consideration to other issues concerning the core public health capacities, including implementation indicators, was also mentioned.

10. Having carefully considered all the comments made by Member States, the Secretariat proposes that the current criteria³ should be considered as final, on the understanding that the process of granting extensions will include the provision of advice by the Review Committee to the Director-General, in accordance with the Regulations. A Review Committee is therefore expected to be convened by the Director-General in 2014.

INFORMATION RECEIVED FROM STATES PARTIES TO THE INTERNATIONAL HEALTH REGULATIONS (2005)

11. With regard to requests for extensions for the period 2012–2014, 118 of the 196 States Parties concerned have requested and obtained extensions. Forty-two States Parties have not requested extensions.

12. States Parties have continued to provide information to the Secretariat on implementation of the Regulations in relation to the national capacity requirements set out in Annex 1 of the Regulations. As of 18 November 2013, the self-assessment questionnaire sent to States Parties in March had elicited 94 responses, representing 48% of the 196 States Parties. The data show States Parties making good progress on a number of core capacities, notably in the areas of response and zoonotic diseases (with a global average score of 83%), surveillance (81%), laboratories (79%), risk communication (77%), and legislation, coordination and food safety (all at 76%). On the other hand, States Parties reported relatively low capacities for handling radiological events (56%) and chemical events (58%), and capacities at points of entry and human resource capacities (61% and 62%, respectively). The Annex to this report shows the capacity scores by WHO region of all States Parties that submitted a completed questionnaire before this report was finalized.

¹ See document EB132/15 Add.1.

² See Decision CD52(D5) by the Directing Council of the Regional Committee for the Americas at its 65th session.

³ A State Party shall make a formal request in writing to the Director-General at least four months in advance of the target date. Any such request must be accompanied by a new implementation plan. See document A66/16.

GLOBAL PARTNERSHIPS

13. WHO has continued to strengthen its relationships with other international and intergovernmental organizations during the period under review, including the International Atomic Energy Agency (IAEA), the World Meteorological Organization (WMO), FAO, OIE, the International Civil Aviation Organization (ICAO), the International Air Transportation Association (IATA) and the World Bank.

STRENGTHENING NATIONAL CAPACITY

14. All levels of the Organization continue to support States Parties in fulfilling their core capacity requirements under the Regulations. WHO regional offices continue to lead this effort, providing technical support to countries through regional initiatives in a number of key areas. These include the continued enhancement of laboratory quality systems and diagnostic capacity through the development and translation of tools and guidelines, provision of external quality assessment, and organization of training sessions, workshops and on-site assessment or technical assistance missions to all WHO regions. A new training course on leadership and management skills for public health laboratory directors is being developed for implementation as from 2014. Together with FAO and OIE, WHO continues to be responsible for implementation of the IDENTIFY project.¹

15. In the specific area of implementation of the Regulations in national legislation, following a series of subregional workshops in 2011, 2012 and 2013 in several WHO regions, the Secretariat has conducted individual legislative assessment missions to States Parties in the European and South-East Asia regions.

16. In the area of implementation of the Regulations at points of entry, technical support missions to assess country capacity have been conducted by the Secretariat. Consultations, trainings, meetings and workshops have also been held, to further develop competencies and provide technical guidance for public health professionals at points of entry in several WHO regions. These efforts have included the development of a learning programme covering the inspection of ships and the issuance of ship sanitation certificates and the provision of advice about managing public health events occurring on ships and in air travel, and about vector surveillance and control using a multisectoral approach. Additionally, the Secretariat has endeavored to support the establishment of WHO procedures for airport and port certification, as required by the Regulations. With a view to facilitating the exchange of information, the Secretariat has hosted the Ports, Airports and Ground Crossings Network on its website² and is supporting an initiative to designate WHO collaborating centres for points of entry, in order to build core capacities.

17. In areas of national surveillance, the Secretariat, with the support of technical experts from the six WHO regions, has started to draw up global guidance on early warning and response, including event-based surveillance. The Secretariat is also preparing a guide on coordinated surveillance between points of entry and national surveillance systems. In order to facilitate and speed up weekly transmission of surveillance data from remote health facilities to the central level, WHO is also developing an electronic tool partly based on mobile telephone technologies. Finally, the Secretariat has developed and tested a training toolkit targeted at epidemiologists, to be used by course

¹ As described in document A66/16.

² See http://www.who.int/ihr/ports_airports/pagnet/en/index.html.

organizers, programme coordinators and trainers in relevant institutions such as field epidemiology training programmes and schools of public health. This will provide them with a common learning framework and standard quality materials, thereby contributing to harmonized understanding and implementation of the Regulations.

18. In terms of the application of the Regulations to specific risks, significant progress has been made (in collaboration with OIE and FAO) in developing references for good governance across the animal and human health sectors. Consistent material has been produced in recent years by WHO and OIE in their respective sectors to help countries objectively evaluate their situation, address gaps and build capacities, in order to improve their operational capability and comply with international requirements. To tackle problems at the human–animal interface, a joint OIE-WHO programme of work was established in April 2013, focusing on adjusting the framework for monitoring progress in the implementation of core capacities in States Parties so that it better reflects the interface and improving the WHO laboratory assessment tool in relation to the corresponding OIE instrument. In partnership with the World Bank and OIE, WHO is working on drawing up a joint methodological guide for countries that brings together these updated tools in order to strengthen national human and animal health systems governance.

19. More recently, the Secretariat has focused attention on supporting States Parties to assess their needs and the investments required to establish and maintaining their core capacities. The prototype of a costing tool was developed by WHO and partners in 2013 and is currently being tested in selected countries. This prototype was built on the existing monitoring framework for the Regulations and takes account of previously developed tools, analyses and methodologies.

20. The Global Polio Eradication Initiative continues to use the framework of the Regulations to publish information about the international spread of wild poliovirus, including the detection of wild poliovirus and new outbreaks in previously polio-free countries, on the Event Information Site for National IHR Focal Points. All such events are published in parallel in Disease Outbreak News on WHO's public website. Since April 2013, this has included the publication of several event updates on a developing poliomyelitis outbreak in the Horn of Africa and the Middle East.

21. In the area of chemical events, a meeting of the Chemical Events Working Group of the Global Health Security Initiative and a seminar on chemical events and the International Health Regulations (2005) were held in Lyon, France, from 24 to 26 April 2013, to review tools and steps taken by countries participating in the Initiative to help WHO enhance the compliance of States Parties with the Regulations so far as chemical incidents are concerned. The Secretariat also addressed technical issues related to the Regulations at a meeting of WHO's regional and headquarters counterparts for chemical safety from 15 to 17 July 2013. Topics discussed at the meeting included the response to chemical events, core capacities under the Regulations, the International Training Centre for Chemical Incident Management, the Expert Roster under the Regulations, and poison centres.

22. In the area of radiation hazards, in order to strengthen national, regional and WHO's emergency response capacities, the Secretariat worked with IAEA, WMO, FAO, ICAO and other international organizations on an international exercise (ConvEx-3(2013)) based on a malevolent event scenario. The exercise took place in November 2013 and simulated an explosion in Morocco. It tested the notification mechanism under the Regulations as well as WHO's capability to respond to a radiation emergency. The Secretariat also contributed to the meeting of the Radio-Nuclear Threats Working Group of the Global Health Security Initiative (Atlanta, Georgia, United States, April 2013). Finally, in support of strengthening of national laboratory capacities, the Secretariat held the Third Coordination Meeting of the WHO BioDoseNet laboratory network in Leiden, Netherlands, in

March 2013. The primary purpose of the network is to ensure acute dosimetry laboratory surge capacity in the event of a mass-casualty radio-nuclear emergency.

PREVENTION OF AND RESPONSE TO INTERNATIONAL PUBLIC HEALTH EMERGENCIES

23. The network of National IHR Focal Points and WHO IHR Contact Points have been increasingly used for rapid communication of public health information between WHO and States Parties, including with respect to MERS-CoV and human infection with avian influenza A(H7N9) virus. The number of users in National IHR Focal Points with access to the Event Information Site has continued to grow and currently stands at 751, representing 186 States Parties.

24. WHO continues to detect, track and respond to public health risks and emergencies, in a timely manner and in close collaboration with countries, within the framework of the Regulations. In addition to MERS-CoV-related events (see above), from 21 February 2012 to 25 October 2013, 433 events were recorded in the Event Management System. Of these, 167 (39% of the total) were substantiated as real events needing to be monitored, 32 (7%) were discarded as false rumours after verification, 93 (21%) were real events that did not meet the definition of an outbreak and 7 (2%) were deemed to be unverifiable. No final classification has been attributed to 134 events (31%). In summary, 69% of the events recorded completed a verification process during the period.

25. These routine international surveillance and response activities have been recently enhanced by the launching a new version of the Event Information Site for communications with National IHR Focal Points, to provide easier access to information related to acute public health events. The updated technology will ensure that the site can be further extended to accommodate future needs and expansion of information-sharing.

26. Two web-based tutorials were launched to train National IHR Focal Points in the use of Annex 2 of the Regulations. These tutorials provide a number of scenarios in which National IHR Focal Point personnel assess whether the events must be notified to WHO. Following the completion of each module, the user is provided with the responses proposed by an expert panel, as well as explanations for these responses. The purpose of the Annex 2 tutorials is to support staff of all National IHR Focal Points in increasing the sensitivity and consistency of the assessment and notification process. The tutorials are based on the recommendations made by the Review Committee on the Functioning of the International Health Regulations (2005) in relation to Pandemic (H1N1) 2009;¹ they are also accessible from the WHO website.²

27. With regard to food-related events, the links between the emergency contact points in countries for the International Food Safety Authorities Network and their National IHR Focal Points have been strengthened, with the strong support of the Secretariat, through continuous efforts to ensure that at the national level both networks are informed when responding to an event. The Network's Secretariat has also offered advice and support to States Parties that are requesting an extension of the deadline under the Regulations for ensuring core capacities in the area of food safety, as set out in the monitoring framework.

¹ Document A64/10.

² See http://www.who.int/ihr/annex_2_tutorial/en/index.html.

YELLOW FEVER VACCINATION OR REVACCINATION

28. Yellow fever is the only disease specified in the International Health Regulations (2005) for which countries may require proof of vaccination from travellers as a condition of entry under certain circumstances and may take certain measures if an arriving traveller is not in possession of such a certificate. The Regulations stipulate that vaccination with an approved yellow fever vaccine provides protection against infection for 10 years, and that the certificate of vaccination or revaccination is accordingly valid for 10 years.¹ Requiring the certificate from travellers is at the discretion of each State Party, and it is not currently required by all countries.^{2,3} Recently, the Strategic Advisory Group of Experts on immunization concluded that a single dose of yellow fever vaccine is sufficient to confer sustained immunity and life-long protection against yellow fever disease and a booster dose of yellow fever vaccine is not needed.⁴ WHO has endorsed this conclusion.⁵ In its report the Strategic Advisory Group of Experts on immunization also recommended that WHO should revisit the provisions in the International Health Regulations (2005) relating to the period of validity for international certificates of vaccination against yellow fever.

29. A number of Member States have requested guidance from WHO on implementation of this advice under the International Health Regulations (2005). Initial steps have been taken by the Secretariat to inform Member States of the conclusion reached by the Strategic Advisory Group of Experts on immunization and to urge them to consider accepting certificates of vaccination against yellow fever based on vaccination with approved vaccine at any time (provided it is at least ten days since administration of the vaccine prior to arrival).

30. As a consequence, the Director-General has proposed that Annex 7 of the International Health Regulations (2005) should be updated. A draft resolution to this effect is to be found in paragraph 34.

CONCLUSION

31. The procedures contained in the International Health Regulations (2005) for the management of major public health events and emergencies, including the convening of a new Emergency Committee, are being further implemented with the advent of MERS-CoV. This has allowed WHO to apply the lessons learned from pandemic influenza (H1N1) 2009 in a new context. The value of timely reporting and sharing of information has once again been shown in the course of this new event.

32. Significant gains have been made in implementation of the Regulations at the national level during the period under review. At all levels of the Organization, the Secretariat has intensified the

¹ International Health Regulations (2005), second edition. Geneva: World Health Organization; 2008: Annex 7.

² ITH 2012 Country List and ITH 2012 Annexes. In: International travel and health [website]. Geneva: World Health Organization; 2013 (http://www.who.int/entity/ith/chapters/ith2012en_countrylist.pdf and http://www.who.int/entity/ith/chapters/ith2012en_annexes.pdf, accessed 22 November 2013).

³ The International Health Regulations (2005) also provide that vaccination certificates include their expiry date and that they expire based on the date of administration of vaccine; additionally, every worker at a point of entry in an area where WHO has determined that a risk of yellow fever transmission is present and every member of a crew of a conveyance using any such point of entry shall have a valid certificate of vaccination.

⁴ Meeting of the Strategic Advisory Group of Experts on immunization, April 2013 – conclusions and recommendations. Weekly epidemiological record. 2013;88(20):201–216 (<http://www.who.int/wer/2013/wer8820.pdf>, accessed 22 November 2013).

⁵ Vaccines and vaccination against yellow fever WHO Position Paper – June 2013. Weekly epidemiological record. 2013;88(27):269–284, (<http://www.who.int/wer/2013/wer8827.pdf>, accessed 22 November 2013).

technical support it has provided to States Parties in all areas. Effective and timely implementation of the Regulations, however, has encountered some institutional and resource challenges, including uneven levels of support by various stakeholders for specific capacities, hazards and WHO regions or geographical areas. The Secretariat is considering a country-twinning programme to facilitate exchange of best practices and therefore scale up implementation of the Regulations. Although some capacities have improved globally (namely, surveillance, laboratories and risk communication) they remain at a critical level and efforts should be sustained over time. The relatively low level of capacities for handling radiological and chemical events reflects a gap that can be dealt with through the systematic mapping of stakeholders working in these areas, some of whom might not necessarily have yet built strong relations with the health ministries. Capacities at points of entry remain a challenge but several guidelines have been developed recently and are available in different languages to facilitate additional awareness and training. One of the key capacities that remains low is human resources, and only Member States can commit to build and maintain the human resources needed for each capacity under the Regulations. Based on available information, it is anticipated that many States Parties will apply for an additional two-year extension from June 2014 to June 2016, in line with Article 5 and Article 13 of the Regulations.

33. At all levels of the Organization, and in all areas, the Secretariat has intensified the technical support it provides to States Parties. In addition, the Director-General has been appealing to countries in order to obtain their additional commitment to organize a series of high-level events that will help to maintain the momentum to build capacities, emphasizing the importance of national engagement and multisectoral approach. A renewed effort is required to accelerate global capacity to prevent, detect and rapidly respond to infectious disease threats and other risks, whether naturally occurring, intentionally produced or accidentally released. States Parties and partner international organizations from all sectors should come forward and make concrete commitments to making progress in support of this goal.

ACTION BY THE EXECUTIVE BOARD

34. The Board is invited to consider the following draft resolution:

The Executive Board,

Having considered the report on Implementation of the International Health Regulations (2005),¹

RECOMMENDS to the Sixty-seventh World Health Assembly the adoption of the following resolution:

The Sixty-seventh World Health Assembly,

Recalling the recent meeting and report of the Strategic Advisory Group of Experts on immunization,² which completed its scientific review and analysis of evidence on issues concerning vaccination against yellow fever and concluded that a single dose of

¹ Document EB134/32.

² Meeting of the Strategic Advisory Group of Experts on immunization, April 2013 – conclusions and recommendations. Weekly epidemiological record. 2013;88(20):201–216 (<http://www.who.int/wer/2013/wer8820.pdf>, accessed 22 November 2013).

yellow fever vaccine is sufficient to confer sustained immunity and life-long protection against yellow fever disease, and that a booster dose of yellow fever vaccine is not needed;

Noting that in its report the Strategic Advisory Group of Experts on immunization recommended that WHO should revisit the provisions in the International Health Regulations (2005) relating to the period of validity for international certificates for vaccination against yellow fever,

1. ADOPTS, in accordance with paragraph 3 of Article 55 of the International Health Regulations (2005), the updated Annex 7 of the International Health Regulations (2005) attached to this resolution.

Proposed revisions to International Health Regulations (2005), Annex 7

ANNEX 7

REQUIREMENTS CONCERNING VACCINATION OR PROPHYLAXIS FOR SPECIFIC DISEASES

1. In addition to any recommendation concerning vaccination or prophylaxis, the following diseases are those specifically designated under these Regulations for which proof of vaccination or prophylaxis may be required for travellers as a condition of entry to a State Party:

Vaccination against yellow fever.

2. Recommendations and requirements for vaccination against yellow fever:

(a) For the purpose of this Annex:

(i) the incubation period of yellow fever is six days;

(ii) yellow fever vaccines approved by WHO provide protection against infection starting 10 days following the administration of the vaccine;

(iii) this protection continues for the life of the person vaccinated~~10 years~~; and

(iv) the validity of a certificate of vaccination against yellow fever shall extend for the life of the person vaccinated~~a period of 10 years~~, beginning 10 days after the date of vaccination ~~or, in the case of a revaccination within such period of 10 years, from the date of that revaccination.~~

(b) Vaccination against yellow fever may be required of any traveller leaving an area where the Organization has determined that a risk of yellow fever transmission is present.

(c) If a traveller is in possession of a certificate of vaccination against yellow fever which is not yet valid, the traveller may be permitted to depart, but the provisions of paragraph 2(h) of this Annex may be applied on arrival.

- (d) A traveller in possession of a valid certificate of vaccination against yellow fever shall not be treated as suspect, even if coming from an area where the Organization has determined that a risk of yellow fever transmission is present.
- (e) In accordance with paragraph 1 of Annex 6 the yellow fever vaccine used must be approved by the Organization.
- (f) States Parties shall designate specific yellow fever vaccination centres within their territories in order to ensure the quality and safety of the procedures and materials employed.
- (g) Every person employed at a point of entry in an area where the Organization has determined that a risk of yellow fever transmission is present, and every member of the crew of a conveyance using any such point of entry, shall be in possession of a valid certificate of vaccination against yellow fever.
- (h) A State Party, in whose territory vectors of yellow fever are present, may require a traveller from an area where the Organization has determined that a risk of yellow fever transmission is present, who is unable to produce a valid certificate of vaccination against yellow fever, to be quarantined until the certificate becomes valid, or until a period of not more than six days, reckoned from the date of last possible exposure to infection, has elapsed, whichever occurs first.
- (i) Travellers who possess an exemption from yellow fever vaccination, signed by an authorized medical officer or an authorized health worker, may nevertheless be allowed entry, subject to the provisions of the foregoing paragraph of this Annex and to being provided with information regarding protection from yellow fever vectors. Should the travellers not be quarantined, they may be required to report any feverish or other symptoms to the competent authority and be placed under surveillance.

ANNEX

Table. International Health Regulations (2005): national capacity monitoring. Capacity scores for all reporting States Parties for 2013

African Region

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiological
Algeria	Data for 2013 not yet available												
Angola	Data for 2013 not yet available												
Benin	Data for 2013 not yet available												
Botswana	0	10	65	52	0	29	20	81	67	78	33	0	15
Burkina Faso	100	80	65	87	45	43	60	86	4	100	87	23	50
Burundi	Data for 2013 not yet available												
Cameroon	100	100	85	94	100	100	100	100	28	100	73	92	85
Cape Verde	Data for 2013 not yet available												
Central African Republic	Data for 2013 not yet available												
Chad	Data for 2013 not yet available												
Comoros	Data for 2013 not yet available												
Congo	Data for 2013 not yet available												
Côte d'Ivoire	Data for 2013 not yet available												
Democratic Republic of the Congo	50	46	85	70	60	100	40	100	25	78	60	0	77
Equatorial Guinea	Data for 2013 not yet available												

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiological
Eritrea	50	100	80	94	45	29	60	86	52	89	33	54	0
Ethiopia	Data for 2013 not yet available												
Gabon	Data for 2013 not yet available												
Gambia	Data for 2013 not yet available												
Ghana	75	73	85	88	51	43	40	100	31	100	53	54	62
Guinea	Data for 2013 not yet available												
Guinea-Bissau	Data for 2013 not yet available												
Kenya	50	100	85	83	53	57	40	96	71	100	73	46	46
Lesotho	Data for 2013 not yet available												
Liberia	Data for 2013 not yet available												
Madagascar	Data for 2013 not yet available												
Malawi	Data for 2013 not yet available												
Mali	Data for 2013 not yet available												
Mauritania	Data for 2013 not yet available												
Mauritius	Data for 2013 not yet available												
Mozambique	0	73	90	94	43	43	100	39	59	56	87	8	8
Namibia	Data for 2013 not yet available												
Niger	Data for 2013 not yet available												
Nigeria	Data for 2013 not yet available												
Rwanda	Data for 2013 not yet available												
Sao Tome and Principe	0	46	40	28	8	14	0	36	12	22	0	0	0
Senegal	Data for 2013 not yet available												

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiological
Seychelles	0	73	95	88	8	43	40	96	30	100	80	54	0
Sierra Leone	Data for 2013 not yet available												
South Africa	Data for 2013 not yet available												
South Sudan	Data for 2013 not yet available												
Swaziland	0	36	65	71	0	86	60	67	11	56	47	8	8
Togo	0	83	90	94	80	0	80	67	9	67	47	23	8
Uganda	Data for 2013 not yet available												
United Republic of Tanzania	Data for 2013 not yet available												
Zambia	Data for 2013 not yet available												
Zimbabwe	Data for 2013 not yet available												
Total	33	63	72	73	38	45	49	73	31	73	52	28	28

Region of the Americas

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiological
Antigua and Barbuda	Data for 2013 not yet available												
Argentina	Data for 2013 not yet available												
Bahamas	Data for 2013 not yet available												
Barbados	100	53	100	89	90	86	60	96	100	100	73	54	15
Belize	Data for 2013 not yet available												

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiological
Bolivia (Plurinational State of)	100	87	85	65	41	71	40	96	21	89	53	15	69
Brazil	100	90	90	100	90	100	80	96	80	89	93	62	92
Canada	100	83	100	100	100	100	100	100	100	100	100	100	100
Chile	75	100	90	89	100	43	20	86	46	89	93	31	92
Colombia	100	63	50	76	33	100	80	76	83	89	67	77	69
Costa Rica	Data for 2013 not yet available												
Cuba	Data for 2013 not yet available												
Dominica	Data for 2013 not yet available												
Dominican Republic	Data for 2013 not yet available												
Ecuador	Data for 2013 not yet available												
El Salvador	100	100	100	100	90	100	100	100	90	100	67	54	69
Grenada	Data for 2013 not yet available												
Guatemala	Data for 2013 not yet available												
Guyana	100	83	80	100	90	86	100	100	38	100	67	62	0
Haiti	Data for 2013 not yet available												
Honduras	Data for 2013 not yet available												
Jamaica	100	66	70	87	71	57	20	47	62	67	67	62	23
Mexico	Data for 2013 not yet available												
Nicaragua	Data for 2013 not yet available												
Panama	Data for 2013 not yet available												
Paraguay	100	90	70	83	53	100	60	100	34	67	73	69	77

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiological
Peru	Data for 2013 not yet available												
Saint Kitts and Nevis	Data for 2013 not yet available												
Saint Lucia	Data for 2013 not yet available												
Saint Vincent and the Grenadines	Data for 2013 not yet available												
Suriname	50	83	85	89	48	43	0	100	84	67	87	62	0
Trinidad and Tobago	50	40	95	76	71	71	20	81	77	89	87	54	77
United States of America	100	100	100	94	100	100	100	50	100	100	100	100	100
Uruguay	Data for 2013 not yet available												
Venezuela (Bolivarian Republic of)	50	90	90	94	80	71	100	86	59	100	87	92	92
Total	82	75	80	83	70	75	59	81	65	83	74	60	58

South-East Asia Region

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiological
Bangladesh	Data for 2013 not yet available												
Bhutan	50	36	10	76	35	29	80	33	15	67	27	0	0

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiological
Democratic People's Republic of Korea	Data for 2013 not yet available												
India	Data for 2013 not yet available												
Indonesia	100	53	90	81	91	86	80	96	91	100	67	46	100
Maldives	Data for 2013 not yet available												
Myanmar	100	73	100	100	100	100	100	70	97	100	100	46	8
Nepal	75	73	70	67	66	83	20	100	21	100	73	31	8
Sri Lanka	100	63	85	77	53	86	80	41	65	100	80	23	15
Thailand	Data for 2013 not yet available												
Timor-Leste	Data for 2013 not yet available												
Total	85	60	71	80	69	77	72	68	58	93	69	29	26

European Region

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiological
Albania	Data for 2013 not yet available												
Andorra	75	30	70	44	8	14	0	25	0	0	0	0	0
Armenia	75	100	85	88	91	100	100	79	97	100	93	92	100
Austria	100	90	80	100	83	100	100	100	91	89	93	46	92
Azerbaijan	50	83	100	94	75	57	100	96	86	100	93	85	77
Belarus	Data for 2013 not yet available												
Belgium	100	63	65	72	46	100	60	91	70	89	100	92	100
Bosnia and Herzegovina	Data for 2013 not yet available												

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiological
Bulgaria	0	0	0	0	0	0	0	0	0	0	0	0	0
Croatia	100	90	85	100	100	100	100	87	86	100	100	100	100
Cyprus	Data for 2013 not yet available												
Czech Republic	100	83	95	100	75	86	60	100	48	100	100	100	100
Denmark	100	80	90	100	100	86	0	91	89	89	100	100	92
Estonia	25	73	90	65	55	100	40	91	86	100	100	100	77
Finland	Confirmed that capacity status remains the same as in 2012												
France	100	80	95	100	80	86	60	100	21	100	100	85	100
Georgia	100	83	100	100	100	100	100	96	94	100	67	62	83
Germany	Data for 2013 not yet available												
Greece	Data for 2013 not yet available												
Holy See	Data for 2013 not yet available												
Hungary	100	100	85	94	100	100	100	96	82	100	100	100	100
Iceland	Data for 2013 not yet available												
Ireland	Data for 2013 not yet available												
Israel	Data for 2013 not yet available												
Italy	Data for 2013 not yet available												
Kazakhstan	100	53	70	76	50	43	100	86	100	89	100	100	100
Kyrgyzstan	Data for 2013 not yet available												
Latvia	Data for 2013 not yet available												
Lichtenstein	Data for 2013 not yet available												
Lithuania	100	83	95	65	63	100	0	100	97	100	100	100	100
Luxembourg	100	90	75	100	90	100	40	87	96	100	80	85	92
Malta	100	83	100	83	75	67	0	87	42	100	100	90	62
Monaco	75	63	80	83	70	71	20	57	100	88	100	92	54
Montenegro	25	83	80	59	65	71	20	77	9	63	73	31	62
Netherlands	Data for 2013 not yet available												
Norway	Data for 2013 not yet available												

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiological
Poland	Data for 2013 not yet available												
Portugal	Data for 2013 not yet available												
Republic of Moldova	Data for 2013 not yet available												
Romania	50	46	80	89	73	71	40	76	4	89	93	85	92
Russian Federation	Data for 2013 not yet available												
San Marino	Data for 2013 not yet available												
Serbia	Data for 2013 not yet available												
Slovakia	100	100	100	100	100	100	100	100	71	100	100	83	92
Slovenia	100	20	72	61	62	0	20	41	38	100	100	100	82
Spain	100	83	95	100	83	57	80	76	4	0	0	0	0
Sweden	Confirmed that capacity status remains the same as in 2012												
Switzerland	100	100	90	94	91	86	20	80	88	100	100	100	100
Tajikistan	Data for 2013 not yet available												
The Former Yugoslav Republic of Macedonia	100	63	55	83	61	100	20	71	85	86	87	77	46
Turkey	Data for 2013 not yet available												
Turkmenistan	Data for 2013 not yet available												
Ukraine	Data for 2013 not yet available												
United Kingdom of Great Britain and Northern Ireland	Data provided in a format that could not be included in the analysis												
Uzbekistan	Data for 2013 not yet available												
Total	83	73	81	82	72	76	51	80	63	83	83	76	76

Eastern Mediterranean Region

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiological
Afghanistan	0	46	75	40	10	57	40	45	3	67	20	0	62
Bahrain	100	20	0	0	0	14	0	0	32	0	0	46	0
Djibouti	Data for 2013 not yet available												
Egypt	75	100	90	94	90	100	100	70	97	89	80	92	69
Iran (Islamic Republic of)	Data for 2013 not yet available												
Iraq	100	100	100	100	100	100	100	100	91	100	93	54	77
Jordan	Data for 2013 not yet available												
Kuwait	100	100	70	76	100	100	100	100	100	100	100	0	77
Lebanon	Data for 2013 not yet available												
Libyan Arab Jamahiriya	Data for 2013 not yet available												
Morocco	100	100	100	100	100	100	100	86	93	100	100	77	100
Oman	Data for 2013 not yet available												
Pakistan	Data for 2013 not yet available												
Qatar	Data for 2013 not yet available												
Saudi Arabia	Data for 2013 not yet available												
Somalia	Data for 2013 not yet available												
Sudan	50	100	90	82	65	57	80	50	24	100	73	46	38
Syrian Arab Republic	Data for 2013 not yet available												
Tunisia	Data for 2013 not yet available												
United Arab Emirates	Data for 2013 not yet available												
Yemen	Data for 2013 not yet available												
Total	75	81	75	70	66	75	74	64	63	79	67	45	60

Western Pacific Region

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiological
Australia	100	100	95	94	100	100	100	96	100	100	87	100	100
Brunei Darussalam	75	100	90	100	70	71	100	100	88	100	100	31	46
Cambodia	50	46	95	41	20	43	0	57	16	78	47	38	15
China	100	100	100	100	100	100	100	96	24	100	100	100	100
Cook Islands	100	100	90	100	90	100	80	96	100	100	100	69	38
Fiji	100	100	85	100	100	100	100	100	94	100	87	92	77
Japan	100	100	100	94	100	100	100	100	94	100	100	100	100
Kiribati	100	53	68	89	91	83	50	71	72	100	67	46	23
Lao People's Democratic Republic	100	46	85	58	35	86	80	57	3	78	87	0	0
Malaysia	100	100	100	100	100	100	100	100	100	100	100	100	100
Marshall Islands	100	53	80	83	75	71	100	56	16	0	27	0	0
Micronesia (Federated States of)	50	20	40	59	26	57	20	29	78	22	40	8	0
Mongolia	100	100	70	94	80	100	40	77	97	100	87	38	46
Nauru	Data for 2013 not yet available												
New Zealand	100	100	100	94	100	100	100	91	91	100	100	100	100
Niue	25	56	55	82	70	100	20	96	24	56	67	46	0
Palau	100	53	75	100	100	100	60	76	82	89	100	100	62
Papua New Guinea	25	73	80	76	41	86	60	61	45	100	47	8	0
Philippines	25	100	100	100	91	86	100	57	31	33	60	100	92
Republic of Korea	100	100	100	100	100	100	100	100	100	100	100	100	100

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiological
Samoa	75	100	75	76	61	100	60	53	91	100	93	23	15
Singapore	100	100	100	100	100	100	100	100	100	100	100	100	92
Solomon Islands	0	90	80	77	41	71	40	66	14	67	27	15	31
Tonga	100	100	100	100	80	100	60	96	57	100	60	8	0
Tuvalu	100	83	60	94	91	86	60	100	97	78	93	82	54
Vanuatu	67	100	95	100	81	86	60	96	57	0	87	46	8
Viet Nam	100	83	80	88	90	57	80	50	94	89	87	38	69
Total	80	83	85	88	78	88	72	80	68	80	79	57	49
Global Total	74	74	79	81	68	74	60	77	59	81	73	56	54