
Implementation of the International Health Regulations (2005)

Responding to public health emergencies

Report by the Director-General

1. In response to resolution WHA61.2, in which it was 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, the present report provides an overview of the international response in 2014 and 2015 to public health events and emergencies, with a particular focus on the role of WHO and the International Health Regulations (2005) in preventing, detecting, reporting and responding to such events. This document is a companion to the report by the Review Committee on Second Extensions for Establishing National Public Health Capacities and on IHR Implementation.¹ The Executive Board at its 136th session noted an earlier version of this report² and adopted resolution EB136.R5³ on yellow fever risk mapping and recommended vaccination for travellers. This version of the report presents updated information.

KEY PUBLIC HEALTH EVENTS AND EMERGENCIES IN 2014–2015

2. In 2014 and 2015, WHO detected, tracked and responded to numerous public health risks and emergencies in close collaboration with countries, within the framework of the Regulations. From 1 January 2014 to 28 February 2015, a total of 321 “public health events” was recorded in WHO’s Event Management System.⁴ Over the same period, WHO posted more than 400 updates and announcements on the event information site for National IHR Focal Points, relating to 79 public health events and regional updates. Most updates posted related to the Middle East respiratory syndrome coronavirus (MERS-CoV) event, the influenza A(H7N9) virus event in China and the outbreak of Ebola virus disease in West Africa.

3. In 2014, in line with the relevant provisions of the International Health Regulations (2005), the Director-General determined that events in West Africa concerning Ebola virus disease and the

¹ See document A68/22 Add.1.

² See document EB136/22 and summary records of the 136th session of the Executive Board, eighth meeting, section 1.

³ See document EB136/2015/REC/1 for the resolution, and for the financial and administrative implications for the Secretariat of the adoption of the resolution.

⁴ The Event Management System referred to is an internal monitoring system.

ongoing situation in relation to poliomyelitis constituted public health emergencies of international concern. The Director-General convened meetings of the IHR Emergency Committee on numerous occasions, as follows: eight times for MERS-CoV; five times for polio; and four times for Ebola virus disease. Temporary recommendations for Member States were issued under the Regulations on the international spread of wild poliovirus and regarding the Ebola virus disease outbreak; advice was provided by the Secretariat concerning MERS-CoV. With regard to the International Health Regulations (2005), 2014 and 2015 have been unprecedented years for public health emergencies of international concern.

Ebola virus disease

4. On 18 September 2014, the United Nations Security Council determined that the Ebola virus disease epidemics were a “threat to international peace and security” and unanimously adopted resolution 2177 (2014), which was cosponsored by 134 Member States. That is the highest number of cosponsors that a Security Council resolution has had, and is only the third time that the Security Council has taken such action on a public health crisis.

5. This led to the United Nations General Assembly unanimously adopting on 19 September 2014 resolution 69/1 on measures to contain and combat the recent Ebola outbreak in West Africa and, shortly thereafter, the establishment by the Secretary-General of the United Nations Mission for Ebola Emergency Response (UNMEER). The mission headquarters was set up in Accra, Ghana, and teams were established in Guinea, Liberia and Sierra Leone.

6. As the United Nations specialized agency for health and a central partner in UNMEER, WHO has been at the forefront of these efforts on an international scale, and has characterized the Ebola virus disease outbreak “the most severe, acute health emergency seen in modern times.”¹

7. WHO was first notified of Ebola virus disease cases in Guinea in March 2014 and immediately deployed support. An emergency committee on Ebola virus disease was convened under the International Health Regulations (2005) and met on four occasions: on 6–7 August, 16–21 September, 22 October 2014 and 20 January 2015. Following its first meeting, the Director-General determined that Ebola virus disease in West Africa constituted a public health emergency of international concern and issued temporary recommendations to support countries in their efforts to bring the epidemic under control and prevent international spread.

8. The outbreaks of Ebola virus disease in Senegal and Nigeria were declared over on 17 October 2014 and 19 October 2014, respectively. These results were due in large part to the rapid response of the two countries, including in terms of surveillance, response, measures at points of entry, and risk communication. The third meeting of the Emergency Committee on Ebola virus disease noted that the implementation of the recommended measures may have contributed to limiting any further international spread of the disease. At its fourth meeting, the Committee concluded that “getting to zero” Ebola cases remained the primary concern and guarded against complacency following a decrease in cases in the three most affected countries.

9. WHO and partner organizations agreed on a range of core actions to support countries unaffected by Ebola virus disease in strengthening their preparedness should cases of the disease be introduced. On the basis of existing national and international preparedness efforts, including previous

¹ See document EB136/26.

work to develop core capacity requirements under the Regulations, a set of tools has been developed to support countries to intensify and accelerate their preparedness. Country visits have taken place in all regions to identify strengths in current national preparedness plans and to propose ways to address the gaps.

10. One of the key challenges of the ongoing Ebola virus disease epidemic is to ensure that the temporary recommendations issued by the Director-General under the International Health Regulations (2005) in respect of the Ebola virus disease are properly understood and implemented. Of particular concern is the recommendation urging Member States not to adopt unilateral travel and trade measures affecting countries experiencing intense transmission. In this connection, the Secretariat monitors travel and trade measures that vary from the above recommendations and communicates with Member States to confirm the exact nature and public health rationale for the measures. As at 19 February 2015, 505 reports had been recorded concerning such measures, involving a total of 69 countries. Where these measures were perceived as excessive, 42 verification requests were sent to the countries in question and 23 justifications for the measures were received. A further follow-up request for justification or update on measures implemented was sent to 40 countries. Three countries denied having closed their borders because of concerns relating to Ebola virus disease.

11. At the special session of the Executive Board in January 2015, members recognized that the Ebola outbreak demonstrated the urgency for all countries to have health systems capable of fully implementing the International Health Regulations (2005).¹

Middle East respiratory syndrome coronavirus

12. MERS-CoV was first identified in Saudi Arabia in 2012. The virus appears to be circulating widely throughout the Arabian Peninsula. Cases have been reported in a total of 23 countries, including some in North America, Asia and Europe. Globally, 1060 laboratory-confirmed cases of infection with MERS-CoV, including at least 394 related deaths, had been reported to WHO by 9 March 2015.²

13. The grave concern surrounding this disease prompted the Director-General to convene an Emergency Committee on Middle East respiratory syndrome coronavirus. The Emergency Committee's first meeting took place on 9 July 2013,³ and has met on eight occasions in total. It has not advised the Director-General to declare the event a public health emergency of international concern, but has recommended that States Parties better understand the situation and take preventive measures, including in relation to pilgrims visiting the region.

14. The Emergency Committee noted at its eighth meeting on 4 February 2015 that, although significant efforts had been made to strengthen infection prevention and control measures, transmission in health care settings continued to occur. It noted also that, although the pattern of transmission appeared relatively unchanged, the overall situation and the possibility of international spread of the virus remained a concern.

¹ See resolution EBSS3.R1.

² For more information on MERS-CoV, see <http://www.who.int/csr/don/11-march-2015-mers-qatar/en/> (accessed 19 March 2015).

³ For more information on the Emergency Committee, see: http://www.who.int/ihr/ihr_ec_2013/en/ (accessed 4 March 2015).

15. The Secretariat continues to work with affected countries, as well as international technical partners and networks to coordinate the global health response, including providing updated information, conducting risk assessments and joint investigations with national authorities, convening scientific meetings, and developing guidance and training for health authorities and technical health agencies.

16. The Secretariat is continuing to provide regular updates to members and advisors of the Emergency Committee and the Committee will be reconvened, should circumstances require.

Poliomyelitis

17. The number of poliomyelitis cases has decreased by more than 99% since 1988 as a result of the global effort to eradicate the disease; however, the number of cases in 2013 increased by 82% over 2012, with eight countries reporting cases compared to five in 2012. On 5 May 2014, the Director-General convened an Emergency Committee under the International Health Regulations (2005) to review the situation. She declared that the international spread of wild poliovirus in 2014 constituted a public health emergency of international concern under the Regulations. She also issued temporary recommendations to reduce the international spread of wild poliovirus. The recommendations provide that those countries currently exporting wild poliovirus should ensure that all residents and long-term visitors (for more than four weeks) receive a dose of oral polio vaccine or inactivated poliovirus vaccine between four weeks and 12 months before international travel, and should also ensure that such travellers are provided with proof of vaccination. Other polio-affected countries not exporting wild poliovirus are encouraged to vaccinate residents and long-term visitors before international travel.¹ At its fourth meeting on 17 February 2015,² the Emergency Committee advised that the Director-General's temporary recommendations should apply to a third category of States: those no longer infected by wild poliovirus, but which remain vulnerable to its international spread.

18. Finally, the Director-General requested the Committee to reassess the situation within the next three months and provide advice on the important matter of whether the temporary recommendations should continue beyond the Sixty-eighth World Health Assembly or a standing recommendation under the Regulations would be needed in order to reduce more effectively the risk of international spread of poliovirus at that time.

Avian influenza A(H5N1) and A(H7N9) viruses

19. Influenza pandemics are recurring events that can have major health, economic and social consequences worldwide. With the growth of global travel, detecting the emergence of a new influenza virus and monitoring the activity of potential pandemic viruses, such as avian influenza A(H5N1) and A(H7N9) viruses, are crucial activities as influenza viruses can evolve rapidly, acquire efficient transmissibility and result in a pandemic, with little time to prepare a public health response.

20. Avian influenza A(H7N9) virus is a subtype of influenza viruses that normally infects birds but sometimes infects people. The first human infection was reported in China in March 2013 and was followed by a second and third epidemic wave in the winter months of 2014 and 2015 in the

¹ For more information on see <http://www.polioeradication.org/Infectedcountries/PolioEmergency.aspx#sthash.QuVm3bU5.dpuf> (accessed 5 March 2015).

² For more information on the temporary recommendations for polio see <http://www.who.int/mediacentre/news/statements/2015/polio-27-february-2015/en/#> (accessed 5 March 2015).

northern hemisphere. Since November 2014, a rapid increase in human infections with avian influenza A(H5N1) virus was reported in Egypt with 140 human cases reported between 1 November 2014 and 16 March 2015. Globally, an unprecedented number of outbreaks with avian influenza A(H5) viruses is being reported in birds with subtypes including H5N1, H5N2, H5N6 and H5N8, in Africa, Asia, Europe and North America. The avian influenza A(H5N1) and A(H7N9) viruses are the most obvious concern as they continue spreading in birds, reassorting with other avian influenza viruses that are endemic in various parts of the world, and causing infections in humans. The human population does not have immunity to these viruses, and they can cause severe disease and death in humans once infection occurs. Despite continuous zoonotic infections, these viruses so far do not have the ability to spread easily from human to human and the overall pandemic risk has not increased.

21. Under the International Health Regulations (2005), the Secretariat and Member States continue to monitor closely avian influenza A(H7N9) and A(H5N1) viruses and other influenza viruses of pandemic potential, conduct risk assessments, build preparedness and response capacities, and provide guidance to countries. WHO develops and adjusts appropriate interventions in collaboration with its partners, including animal health agencies and national veterinary authorities, in particular FAO and OIE through a variety of mechanisms to track and assess the risk of animal influenza viruses of public health concern.¹ Through the WHO Global Influenza Surveillance and Response System, candidate vaccine viruses of influenza with pandemic potential are available and updated, and antiviral susceptibility is being monitored. So far these viruses in general are sensitive to available antiviral medicines oseltamivir and zanamivir.

PROGRESS ON IMPLEMENTATION OF THE INTERNATIONAL HEALTH REGULATIONS (2005)

22. States Parties have continued to provide information to the Secretariat on the implementation of the International Health Regulations (2005) in relation to the national capacity requirements set out in Annex 1 of the Regulations. As at 31 March 2015, 160 States Parties from a total of 196 had reported on the implementation of the Regulations in 2014. The latest capacity scores, by WHO region, of States Parties that submitted a completed questionnaire are set out in the Annex.

23. Analysis of the self-reported information provided to the Secretariat by States Parties suggests that significant progress has been made in the following areas: establishment of a 24 hour presence of National IHR Focal Points; increased transparency in reporting events; more systematic use of early warning systems; better communication and collaboration between the animal and human health sectors (for example, sharing lessons learnt from the avian influenza A(H5N1) virus applied to the avian influenza A(H7N9) virus); coordinated collective efforts of countries and partners to build capacities; establishment of emergency response, coordination structures and improved international mechanisms to share information for rapid response.

24. All levels of the Organization have taken initiatives aimed at accelerating progress on implementation of the International Health Regulations (2005). These have been intensively reviewed at all the recent regional committee sessions, at which lessons learnt from outbreaks of Ebola virus disease and other public health events and emergencies relevant to the Regulations were discussed.

¹ For more information on avian influenza, see: http://www.who.int/mediacentre/factsheets/avian_influenza/en/ (accessed 20 March 2015).

25. Following the discussions of the Executive Board at its 136th session and building on lessons learnt from the current situation of Ebola virus disease and the outcome of preparedness missions in the most at-risk countries in Africa, the Secretariat is currently considering options for strengthening the current system of self-assessment of IHR core capacities in order to incorporate an additional assessment mechanism to help countries to identify gaps, and develop and maintain core capacities. Options include systematic reviews of preparedness and response to significant public health events, voluntary external evaluations of the implementation of the Regulations in countries, and use of exercises to regularly test IHR capacities. The Secretariat will consult with Member States to further develop these options.

REVIEW COMMITTEE ON SECOND EXTENSIONS FOR ESTABLISHING NATIONAL PUBLIC HEALTH CAPACITIES AND ON IMPLEMENTATION OF THE INTERNATIONAL HEALTH REGULATIONS (2005)

26. Under Articles 5 and 13 of the International Health Regulations (2005), States Parties may request extensions to meet their core surveillance and response capacity requirements set out in Annex 1 of the Regulations. In total, 64 States Parties have informed the Secretariat that they have achieved these core capacities, 81 have requested extensions and 48 did not communicate their status or intentions. All extension requests for the period 2014–2016 were granted by the Director-General following the convening of the Review Committee on Second Extensions for Establishing National Public Health Capacities and on IHR (2005) Implementation (Geneva, 13 and 14 November 2014).¹

CONCLUSION

27. There is a wide consensus that the International Health Regulations (2005) have helped the international community to manage acute public health events and emergencies significantly better. Many States Parties have successfully assessed and strengthened the core national and local capacities called for in the Regulations. However, as illustrated by the Ebola virus disease outbreak, such capacities are not yet adequately established, resulting in catastrophic human, financial and economic consequences from the impact of the disease in the three countries with intense transmission. Considering the cost of the response, the need to invest now in capacities to better prevent, detect and respond rapidly to public health events has never been more evident.

28. The meeting of the Review Committee has recommended expanding the focus from mere compliance with the International Health Regulations (2005) to an emphasis at country level on the progressive realization of rights and obligations under the Regulations. The Committee further indicated that implementation of the Regulations, and public capacity strengthening in particular, should be seen as a continuous process, as opposed to one that comes to an end at any particular date, including 2016. These important shifts in perspective emphasize the integral relationship between the International Health Regulations (2005) and health systems, and the need for sustained investment.

ACTION BY THE HEALTH ASSEMBLY

29. The Health Assembly is invited to note the report.

¹ See document EB136/22 Add.1.

ANNEX

International Health Regulations (2005): national capacity monitoring

Capacity scores for all reporting States Parties for 2014

African Region

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiation
Algeria	100	100	85	94	80	29	60	76	72	89	53	15	69
Angola	50	73	25	28	0	14	20	0	0	0	20	0	0
Benin	0	90	50	58	46	29	80	66	40	56	13	0	38
Botswana													
Burkina Faso	100	46	90	57	51	57	40	77	3	67	33	15	15
Burundi	100	73	100	87	80	86	20	70	85	100	0	0	0
Cameroon	100	100	85	94	100	100	100	100	40	100	73	92	100
Cabo Verde													
Central African Republic	0	36	40	47	16	14	40	51	18	33	20	0	0
Chad													
Comoros													
Congo													
Côte d'Ivoire													
Democratic Republic of the Congo	50	46	85	70	60	100	100	100	39	89	67	0	92
Equatorial Guinea													
Eritrea	100	100	95	100	91	71	60	86	38	78	33	54	0
Ethiopia	100	66	95	100	80	100	100	100	91	100	0	0	69
Gabon													
Gambia	50	53	45	22	0	71	20	41	21	0	67	38	0
Ghana	75	73	85	94	51	71	40	100	37	89	67	54	62
Guinea	100	73	90	64	63	43	80	86	33	22	27	0	0
Guinea-Bissau	75	46	55	65	35	57	40	41	6	44	0	0	0
Kenya													
Lesotho													

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiation
Liberia													
Madagascar	0	36	55	34	41	14	40	59	14	44	27	8	0
Malawi	0	43	90	70	0	43	20	66	21	67	40	8	54
Mali													
Mauritania	0	20	45	44	16	0	0	35	3	100	20	46	69
Mauritius	75	83	55	89	53	57	40	51	83	100	87	54	62
Mozambique													
Namibia	75	73	100	70	65	100	60	91	24	67	60	23	46
Niger													
Nigeria	50	100	80	58	53	57	60	67	4	78	53	8	69
Rwanda	25	26	85	71	26	71	40	100	3	44	27	8	8
Sao Tome and Principe	0	46	40	28	8	14	0	36	12	22	0	0	0
Senegal													
Seychelles	0	100	100	100	90	100	100	96	30	100	93	54	31
Sierra Leone	75	70	95	82	50	100	20	100	63	100	27	15	38
South Africa	100	100	100	100	100	100	100	100	100	100	100	100	100
South Sudan	100	63	75	64	90	71	100	37	3	0	0	0	0
Swaziland	100	36	80	94	61	57	40	90	50	89	60	31	8
Togo	50	90	95	76	63	14	80	80	24	89	53	54	23
Uganda													
United Republic of Tanzania	50	66	80	82	25	57	60	77	20	56	60	69	54
Zambia	100	100	100	94	100	100	100	100	37	100	100	77	92
Zimbabwe	50	56	95	87	63	86	80	86	56	100	60	31	31
Regional average	60	67	77	72	53	61	56	73	35	68	43	28	36

Region of the Americas

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiation
Antigua and Barbuda	100	100	100	82	73	71	100	81	86	100	100	85	23
Argentina	50	73	80	83	100	86	100	90	86	100	60	69	62
Bahamas	75	83	100	70	41	86	40	96	74	44	47	38	0
Barbados	75	53	70	82	70	71	80	86	97	89	60	46	38
Belize													
Bolivia (Plurinational State of)	100	90	80	76	60	43	20	71	31	78	53	15	77
Brazil	100	100	100	100	100	100	100	96	80	100	100	85	92
Canada	100	100	95	100	100	100	100	100	100	100	100	100	100
Chile	75	83	95	94	61	71	60	86	35	100	93	23	62
Colombia	100	63	50	94	33	100	80	76	91	78	67	69	69
Costa Rica	100	100	95	100	71	100	80	76	97	100	100	77	62
Cuba	100	100	100	100	100	100	100	86	83	100	100	85	100
Dominica	75	100	90	83	60	100	20	73	64	89	87	31	23
Dominican Republic	75	90	85	76	81	100	100	90	64	56	27	31	69
Ecuador	75	100	85	76	71	71	80	71	73	89	80	54	100
El Salvador	100	100	100	100	90	86	100	100	100	100	93	62	77
Grenada													
Guatemala	0	73	75	76	45	57	40	75	60	78	100	62	31
Guyana	100	83	90	100	100	86	100	100	38	100	73	62	0
Haiti	0	46	95	69	20	86	40	96	6	44	27	0	0
Honduras	50	53	90	52	33	43	40	71	36	78	47	8	31
Jamaica	50	73	60	75	73	57	20	53	70	67	47	38	31
Mexico	100	80	95	94	90	100	100	100	94	100	100	85	100
Nicaragua	100	83	100	94	90	100	100	86	90	100	80	92	100
Panama	75	100	95	88	60	71	40	96	65	89	60	15	31
Paraguay													
Peru	100	83	100	94	90	100	80	100	27	100	100	46	85
Saint Kitts and Nevis													
Saint Lucia	25	20	65	58	25	86	40	73	6	89	60	23	0

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiation
Saint Vincent and the Grenadines	75	73	80	66	53	43	20	35	48	100	40	8	0
Suriname	50	83	90	100	83	71	40	100	84	67	87	62	0
Trinidad and Tobago	50	56	95	76	71	71	20	81	77	89	87	62	77
United States of America	100	100	100	100	100	100	100	60	100	100	100	100	100
Uruguay													
Venezuela (Bolivarian Republic of)	50	90	100	100	100	71	100	90	59	100	93	92	85
Regional average	74	81	88	85	71	81	68	83	67	87	76	54	54

South-East Asia Region

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiation
Bangladesh	100	83	90	81	63	100	100	100	44	89	73	92	46
Bhutan	75	90	40	94	61	57	100	66	15	100	53	15	0
Democratic People's Republic of Korea	100	80	95	76	56	71	40	79	39	89	73	31	62
India													
Indonesia	100	100	90	94	100	86	80	100	94	100	100	85	100
Maldives	50	90	55	65	61	71	40	96	61	100	100	54	15
Myanmar	100	73	100	100	100	100	100	70	94	100	100	46	8
Nepal	100	100	90	76	70	86	60	91	27	100	47	8	8
Sri Lanka	75	90	80	76	61	86	80	81	80	100	87	15	15
Thailand	100	90	85	100	100	100	100	100	97	100	100	100	100
Timor-Leste	75	70	85	46	80	100	40	96	25	78	73	54	0
Regional average	88	87	81	81	75	86	74	88	58	96	81	50	35

European Region

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiation
Albania													
Andorra	75	30	70	44	8	14	0	25	0	44	67	0	0
Armenia	100	100	85	100	100	100	80	96	94	100	93	85	92
Austria	75	90	80	100	83	100	100	100	91	89	93	92	92
Azerbaijan	50	83	100	94	75	57	100	96	86	100	93	85	77
Belarus	100	100	65	94	75	71	100	96	97	89	93	92	92
Belgium	100	63	85	72	46	100	60	91	70	89	100	92	100
Bosnia and Herzegovina	75	73	65	53	25	86	20	59	0	78	100	38	54
Bulgaria	75	63	70	71	81	43	0	86	21	100	100	92	100
Croatia	50	36	75	83	90	43	40	76	34	100	87	85	62
Cyprus	75	100	60	89	28	57	0	14	97	89	100	0	100
Czech Republic	100	83	95	100	75	86	60	96	48	100	100	100	100
Denmark	100	90	95	100	100	86	40	91	100	89	100	92	100
Estonia	25	73	95	70	65	86	40	81	90	100	100	85	92
Finland	100	73	95	94	63	100	80	91	91	100	87	77	92
France	100	80	95	100	80	86	60	100	21	100	100	92	100
Georgia	100	100	95	81	100	100	60	96	94	100	100	62	77
Germany	100	100	95	100	100	100	100	96	100	100	100	100	100
Greece													
Holy See													
Hungary	75	100	85	94	100	100	0	96	32	100	93	85	100
Iceland	100	83	85	89	90	71	60	86	94	100	100	54	77
Ireland													
Israel													
Italy													
Kazakhstan	100	53	70	76	83	43	100	96	94	89	100	100	100
Kyrgyzstan													
Latvia	100	66	90	88	100	100	60	100	88	100	100	92	100
Lichtenstein	75	90	90	83	83	71	0	80	0	100	93	92	85
Lithuania	100	83	90	77	63	100	0	77	97	89	100	92	100
Luxembourg	100	90	75	100	90	100	40	96	94	100	80	85	100

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiation
Malta	100	100	100	89	75	71	0	77	42	100	100	77	62
Monaco	75	90	90	94	100	71	20	57	100	78	100	92	54
Montenegro	25	83	80	59	65	86	20	77	9	56	67	31	62
Netherlands	100	100	100	100	80	86	60	96	83	78	100	100	100
Norway	100	100	100	100	100	100	100	100	100	100	100	85	92
Poland	50	100	95	94	81	43	0	100	83	78	73	62	100
Portugal	100	100	100	100	100	100	60	96	91	89	100	85	85
Republic of Moldova	100	90	100	88	35	57	20	96	64	100	80	77	100
Romania	75	66	80	89	81	71	40	76	62	89	87	85	92
Russian Federation	100	90	100	72	81	100	80	66	15	100	80	92	77
San Marino													
Serbia	75	30	85	54	36	43	0	59	12	56	40	46	69
Slovakia	100	100	100	100	100	86	100	100	97	78	100	100	77
Slovenia	100	53	95	60	66	43	20	47	54	100	100	69	77
Spain	100	100	100	94	100	86	100	86	76	100	100	69	100
Sweden	100	73	95	94	83	100	100	96	85	100	87	85	92
Switzerland	100	100	90	100	100	100	20	80	91	100	100	100	100
Tajikistan	100	100	85	94	100	100	100	96	46	100	100	100	100
The former Yugoslav Republic of Macedonia*	100	90	85	94	80	100	60	76	100	100	100	85	77
Turkey	75	73	60	94	61	57	100	96	62	89	80	69	92
Turkmenistan	50	100	85	88	91	57	100	83	88	100	93	92	69
Ukraine													
United Kingdom of Great Britain and Northern Ireland*													
Uzbekistan	100	46	85	88	91	86	100	91	12	100	93	92	100
Regional average	86	82	87	87	78	78	53	84	68	92	93	79	86

* Data provided in a format that could not be included in the analysis.

Eastern Mediterranean Region

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiation
Afghanistan	50	63	90	58	26	71	20	53	15	67	20	23	38
Bahrain	100	100	100	87	100	100	60	100	100	89	100	92	69
Djibouti	100	90	85	76	26	43	0	12	18	56	80	8	0
Egypt	75	100	90	100	90	100	100	100	100	89	87	92	85
Iran (Islamic Republic of)	100	100	100	94	91	71	100	90	97	100	100	46	8
Iraq	100	90	95	100	100	100	100	81	94	100	87	62	77
Jordan	100	100	100	94	100	100	80	100	97	100	100	92	100
Kuwait	100	100	60	100	100	100	60	90	100	100	100	0	92
Lebanon	100	56	80	88	90	57	60	66	49	89	87	69	92
Libya	75	83	45	83	60	43	60	66	66	78	93	15	77
Morocco	100	100	100	100	100	100	100	90	71	100	100	77	100
Oman	100	100	90	94	36	100	100	81	88	100	80	38	31
Pakistan	75	56	45	40	16	29	60	47	9	56	53	23	46
Qatar	100	100	90	100	100	100	100	100	97	89	100	85	100
Saudi Arabia	100	100	95	100	100	100	100	100	97	100	100	100	92
Somalia	0	10	65	5	0	0	0	0	0	0	0	0	0
Sudan	50	100	80	63	81	71	80	61	79	100	40	54	62
Syrian Arab Republic	50	63	95	88	16	43	20	90	68	78	80	46	85
Tunisia	75	80	95	94	16	86	40	47	29	89	80	77	38
United Arab Emirates	100	100	80	100	100	100	80	100	31	100	100	100	100
Yemen	75	46	70	34	18	0	100	86	25	100	33	8	0
Regional average	82	83	83	81	65	72	68	74	63	85	77	53	62

Western Pacific Region

State Party	Legislation	Coordination	Surveillance	Response	Preparedness	Risk communications	Human resources	Laboratory	Points of entry	Zoonotic	Food safety	Chemical	Radiation
Australia	100	100	100	100	100	100	100	96	100	100	87	100	100
Brunei Darussalam	100	100	100	100	90	71	100	100	88	100	100	38	54
Cambodia	50	56	80	47	0	43	0	39	77	78	67	0	0
China	100	100	100	100	100	100	100	100	100	100	87	92	100
Cook Islands													
Fiji	100	100	95	100	100	100	100	100	97	100	100	92	92
Japan	75	100	100	87	100	100	100	100	94	100	100	100	100
Kiribati	100	73	65	78	91	57	40	41	69	56	73	15	23
Lao People's Democratic Republic	100	46	80	58	46	86	100	81	17	89	80	0	0
Malaysia	100	100	100	100	100	100	100	100	100	100	100	100	100
Marshall Islands													
Micronesia (Federated States of)	75	40	40	65	70	100	60	91	87	33	53	54	38
Mongolia	100	83	75	94	61	86	0	100	97	100	53	77	46
Nauru	50	46	90	48	26	14	20	51	60	78	60	0	0
New Zealand	100	100	100	100	100	100	100	96	100	89	100	100	100
Niue	25	66	95	87	73	100	20	96	42	67	73	46	0
Palau	100	100	100	94	100	100	100	80	91	100	100	92	38
Papua New Guinea	75	90	80	81	60	100	60	66	48	100	67	8	0
Philippines	100	73	90	100	90	86	80	90	28	89	80	85	100
Republic of Korea	100	100	100	100	100	100	100	96	100	100	100	100	100
Samoa	75	100	95	72	71	71	80	100	68	78	93	54	31
Singapore	100	100	100	100	100	100	100	100	100	100	100	100	92
Solomon Islands	25	56	85	94	43	86	40	90	60	56	53	15	31
Tonga													
Tuvalu													
Vanuatu													
Viet Nam	100	100	100	94	100	71	80	100	97	100	100	100	100
Regional average	84	83	90	86	78	85	72	87	78	87	83	62	57
Global average	77	79	84	82	70	75	62	81	61	85	75	56	59