1.1 Country preparedness to public health risks and acute events (average score on a 1-100 scale) (R-14)

1.1.1 Documentation sheet

Description	**Primary indicators**
	• All-capacity average International Health Regulations (IHR) score
	Secondary indicators
	• International Health Regulations (IHR) capacity scores:
	  ○ C.1 Policy, Legal and normative Instruments to implement IHR
	  ○ C.2 IHR Coordination, National IHR Focal Point functions and advocacy
	  ○ C.3 Financing
	  ○ C.4 Laboratory
	  ○ C.5 Surveillance
	  ○ C.6 Human resources
	  ○ C.7 Health emergency management
	  ○ C.8 Health services provision
	  ○ C.9 Infection prevention and control (IPC)
	  ○ C.10 Risk communication and community engagement (RCCE)
	  ○ C.11 Points of entry (PoEs) and border health
	  ○ C.12 Zoonotic diseases
	  ○ C.13 Food safety
	  ○ C.14 Chemical events
	  ○ C.15 Radiation emergencies

Calculation	**Primary indicator** • Average of the scores for each IHR capacity

	Secondary indicators • Average of the indicator scores for each IHR capacity
Rationale	The all-capacity average International Health Regulations (IHR) score provides information about a country's preparedness capacity to public health risks and acute events.[1] The IHR (2005) represent an agreement between all World Health Organisation (WHO) Member States, to work together for global health security. More precisely, the IHR are a set of legal instruments designed to ensure and improve countries' capacity to prevent, detect, access, notify and respond to public health risks and acute events of domestic and international concern, while avoiding unnecessary interference with international traffic and trade. Under the IHR, countries are obliged to develop and maintain minimum core capacities for surveillance and response to any potential public health events of international concern. The success of the IHR in ensuring global public health security depends on their full application, implementation, and compliance by all countries. The State Party Self-Assessment Annual Reporting (SPAR) tool is used on an annual basis by countries to report on the implementation of the IHR. The SPAR requires a multisectoral approach to obtain information from all sectors involved in implementing IHR capacities. At the middle of the year, countries initiate the process of self-assessment and reporting to the World Health Assembly. Reporting on a minimum set of 'core capacities' is required from the countries, including the capacity to detect and assess events through surveillance systems and laboratories; notify and reports event to WHO; and verify and respond immediately and appropriately to public health risks and emergencies..[2]
Primary data source	State Parties Self-Assessment Annual Reporting Tool (SPAR), WHO
Technical definitions	The second edition of the SPAR (2021) tool includes 35 indicators covering the 15 IHR capacities. The previous version included 24 indicators and 13 capacities. One or more indicators are used to measure the status of each capacity. Indicators are further broken down in several attributes. For each indicator, the reporting country has to select which of the five levels best describes the country's current status: • Level 1: Policies and strategies to support and facilitate the development and implementation of IHR capacities are not in place or under elaboration or available on an ad hoc basis. • Level 2: Policies and strategies to support and facilitate the development and implementation of IHR capacities are in place at the national level. • Level 3: Policies and strategies to support and facilitate the development and implementation of IHR capacities are in place in all relevant sectors. • Level 4: Policies and strategies to support and facilitate the development and implementation of IHR capacities are in place at the national, intermediate and local levels by all relevant sectors. • Level 5: Policies and strategies to support and facilitate the development and implementation of IHR capacities are revised and updated on a regular basis. The score of each indicator level is classified as a percentage of performance along a 1-5 scale. The level of the capacity will be expressed as the average of all indicators. A color-code is also associated with each capacity level: • Red: indicator Level 1 (score range 0-20%) • Yellow: indicator Level 2 (score range 21-40%) or Level 3 (score range 41-60%) • Green: indicator Level 4 (score range 61-80%) or Level 5 (score range 81-100%) A detailed description of the different capacities and indicators can be find in the "IHR (2005): guidance document for the State Party self-assessment annual reporting tool".[3]

Limitations	IHR scores are based on self-reported key informant data. The process of completion of individual survey sections might present some limitations compared to coordinated and validated responses across survey sections. The type and mix of key informants providing information varied over time. In 2018 and 2021, the number of IHR capacities and indicators was changed, some of the scores might not be directly comparable over time. Before 2021, capacities C.1 and C.3 were combined ("C.1 Legislation and Financing") and capacity C.9 did not exist. In 2018, the numbering and naming of capacities were modified, and new indicators were added to capacities C.1, C.5, C.8 and C.9, and one indicator was removed from capacity C.11.
International comparability	The SPAR tool is conducted across the world. For the EU-27 and EU-14 all-capacity average IHR scores over time, data for some countries were missing. In 2010, data for Bulgaria, Malta, the Netherlands, Portugal were missing. In 2011, data for Greece were missing. In 2012, data for Cyprus, Bulgaria, Croatia, Denmark, Greece, Italy, Portugal, and Romania were missing. In 2013, data for Bulgaria, Germany, Greece, Ireland, Italy, Latvia, and Portugal were missing. In 2014, data for Greece and Italy were missing. In 2015, data for Cyprus, Bulgaria, Germany, Greece, Ireland, Italy, Malta and Poland were missing. In 201, data for Bulgaria, Republic, Finland, Germany, Greece, and Ireland were missing. In 2017, data for Bulgaria, Finland, Greece, Ireland and Italy were missing. In 2018, data for Greece and Poland were missing. In 2020, data for Czech Republic and Slovenia were missing.
Performance dimensions	Resilience, Sustainability
Related indicators	People who perceived that the government is likely to be prepared for the next pandemic (R-13)
Reviewer	Stefaan Van Der Borght (FPS Public Health)

1.1.2 Results

Belgium

In Belgium, the all-capacity average IHR score remained stable at approximately 81% (Level 5) between 2010 and 2020, but decreased to 67% in 2021 and 63% in 2022 (Level 4; Table 1 and Table 2). This decrease in the all-capacity average IHR score was mainly due to low (Level 1 or 2) scores for three capacities: "C.1 Policy, legal and normative instruments to implement IHR" (2022: 20%), "C.2 IHR Coordination, National IHR Focal Point functions and advocacy" (2022: 27%), "C.12 Zoonotic diseases" (20%) and C.13 (2022: 20%). Food safety. Belgium scored Levels 4 or 5 for nine capacities (C.4, C.5, C.8-C.11, C13-C.15), Levels 2 or 3 for three capacities (C.2, C.3 and C.6), and Level 1 for two capacities (C.1 and C.12).

Impact of COVID-19 pandemic

A decrease in the all-capacity average IHR score was observed in 2021, which was due to lower capacity scores for: Legislation and Financing (C.1), IHR Coordination and National IHR Focal Point Functions (C.2), Zoonotic Events and the Human–animal Interface (C.3), and National Health Emergency Framework (C.8) (see Table 2). These lower IHR capacity scores potentially resulted from the COVID-19 pandemic.

International comparison

Between 2010 and 2020, Belgium's all-capacity average IHR scores were similar to the EU-14 or EU-27 average scores (see Figure 1). Even if both Belgium and EU-14 or EU-27 countries had a Level 4 all-capacity average IHR score in 2022, Belgium scored lower than the EU-14 (77%) and EU-27 (76%) averages. Belgium performed better than the EU-14 average for four capacities: C.9, C.10, C.11, and C.14 (see Figure 1).

Table 1 – Scores for IHR capacities, indicators and attributes in Belgium and the EU in 2022 (1-100 scale or %)

			Belgium	EU-14	EU-27
All-capacity average			**63**	**77**	**76**
C.1 Policy, Legal and normative Instruments to implement IHR			**20**	**60**	**62**
	C.1.1	Policy, legal and normative instruments	20	67	70
	C.1.2	Gender Equality in health emergencies	20	53	53
C.2 IHR Coordination, National IHR Focal Point functions and advocacy			**27**	**74**	**73**
	C.2.1	National IHR Focal Point functions	20	73	70
	C.2.2	Multisectoral IHR coordination mechanisms	40	77	79
	C.2.3	Advocacy for IHR implementation	20	71	71
C.3 Financing			**60**	**72**	**69**
	C.3.1	Financing for IHR implementation	40	63	59
	C.3.2	Financing for Public Health Emergency Response	80	81	80
C.4 Laboratory			**68**	**85**	**85**
	C.4.1	Specimen referral and transport system	60	81	84
	C.4.2	Implementation of a laboratory biosafety and biosecurity regime	80	84	81
	C.4.3	Laboratory quality system	100	83	87
	C.4.4	Laboratory testing capacity modalities	100	96	90
	C.4.5	Effective national diagnostic network	0	83	84
C.5 Surveillance			**80**	**84**	**85**
	C.5.1	Early warning surveillance function	80	83	84
	C.5.2	Event management (i.e., verification, investigation, analysis, and dissemination of information)	80	86	86
C.6 Human resources			**50**	**67**	**66**
	C.6.1	Human resources for implementation of IHR	60	70	69
	C.6.2	Workforce surge during a public health event	40	64	64
C.7 Health emergency management			**60**	**72**	**73**
	C.7.1	Planning for health emergencies	80	67	70
	C.7.2	Management of health emergency response	20	74	74
	C.7.3	Emergency logistic and supply chain management	80	76	76
C.8 Health services provision			**80**	**87**	**83**
	C.8.1	Case management	80	89	84
	C.8.2	Utilization of health services	80	96	92
	C.8.3	Continuity of essential health services (EHS)	80	77	73
C.9 Infection prevention and control (IPC)			**87**	**81**	**78**
	C.9.1	IPC programmes	100	80	73
	C.9.2	Health care-associated infections (HCAI) surveillance	80	77	76
	C.9.3	Safe environment in health facilities	80	86	84

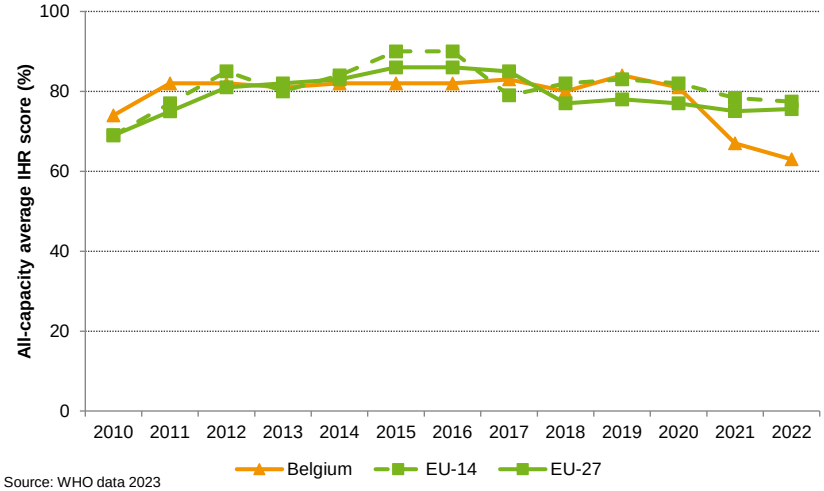
C.10 Risk communication and community engagement (RCCE)			**93**	**76**	**68**
	C.10.1	RCCE system for emergencies	100	73	67
	C.10.2	Risk communication	80	76	73
	C.10.3	Community engagement	100	79	64
C.11 Points of entry (PoEs) and border health			**93**	**71**	**69**
	C.11.1	Core capacity requirements at all times for PoEs (airports, ports and ground crossings)	100	69	65
	C.11.2	Public health response at points of entry	80	64	63
	C.11.3	Risk-based approach to international travel-related measures	100	81	78
C.12 Zoonotic diseases			**20**	**80**	**78**
	C.12.1	One Health collaborative efforts across sectors on activities to address zoonoses	20	80	78
C.13 Food safety			**20**	**84**	**84**
	C.13.1	Multisectoral collaboration mechanism for food safety events	20	84	84
C.14 Chemical events			**100**	**83**	**74**
	C.14.1	Resources for detection and alert	100	83	74
C.15 Radiation emergencies			**80**	**83**	**84**
	C.15.1	Capacity and resources	80	83	84

Table 2 – Scores for IHR capacities and indicators in Belgium (2010-2022)

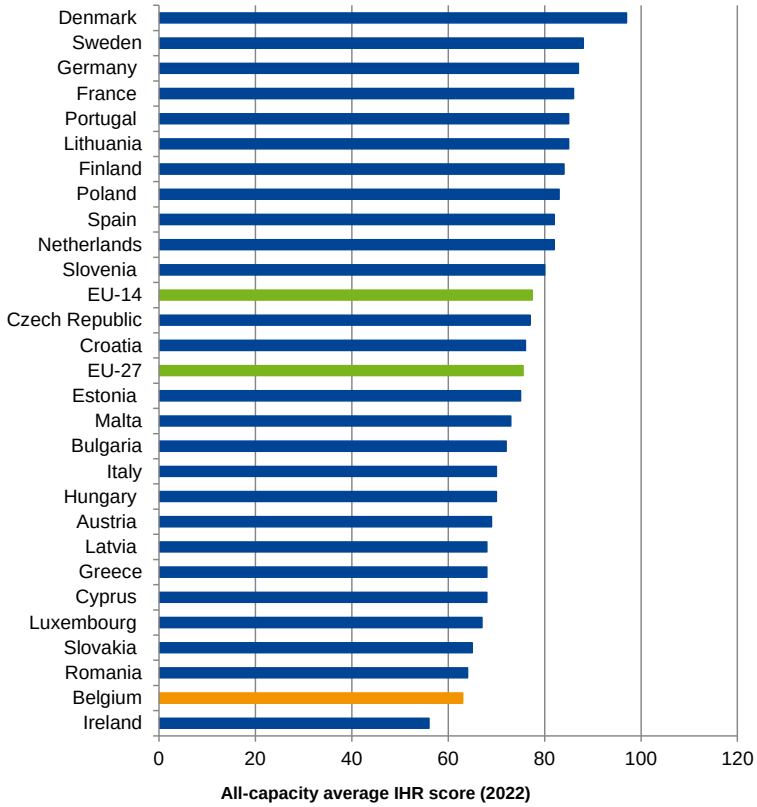
Year	All-capacity average	C.1 Legislation and Financing*	C.2 IHR Coordination and National IHR Focal Point Functions	C.3 Zoonotic Events and the Human–animal Interface	C.4 Food Safety	C.5 Laboratory	C.6 Surveil-lance	C.7 Human Resources	C.8 National Health Emergency Framework	C.9 Health Service Provision	C.10 Risk Communication	C.11 Points of Entry	C.12 Chemical Events	C.13 Radiation Emergencies
2010	74	100	75	53	93	80	51	50	78	88	70	77	64	86
2011	82	100	80	89	100	91	65	60	50	72	100	70	92	100
2012	82	100	80	89	100	91	65	60	50	72	100	50	92	100
2013	81	100	63	89	100	91	65	60	46	72	100	70	92	100
2014	82	100	63	89	100	91	85	60	46	72	100	70	92	100
2015	82	100	63	89	100	92	85	60	47	72	100	69	92	100
2016	82	100	63	89	100	92	85	60	47	72	100	69	92	100
2017	83	100	63	100	100	92	85	60	47	72	100	74	85	100
2018	80	47	80	100	100	100	90	40	87	80	80	70	60	100
2019	84	60	80	100	100	100	90	40	87	80	80	90	80	100
2020	81	47	80	100	100	100	90	40	87	80	80	90	60	100
2021	67	40	27	20	80	76	80	50	60	80	93	93	100	80
2022	63	40	27	20	20	68	80	50	60	80	93	93	100	80

*For the years 2021 and 2022, the average score of "C.1 Policy, legal and normative Instruments to implement IHR" and "C.3 Financing" was used.

Figure 1 – All-capacity average IHR score: international comparison



Source: WHO data 2023



Source: WHO 2023

Key points

- **In Belgium, the all-capacity average IHR score remained stable at Level 5 (range 81-100%) between 2010 and 2020, but decreased to Level 4 (range 61-80%) in 2021 and 2022.**
- **Belgium's lowest IHR capacity scores (Levels 1 or 2) were for "Policy, legal and normative instruments to implement IHR" (C.1), "IHR Coordination, National IHR Focal Point functions and advocacy" (C.2), "Zoonotic diseases" (C.12) and "Food safety" (C.13).**
- **Belgium's all-capacity average IHR score (63%) was lower than both the EU-14 (77%) and EU-27 (76%) average scores in 2022.**

References

1. WHO. e-SPAR State Party Annual Report [Web page].Geneva;2022 [cited 23/02/2023]. Available from: https://extranet.who.int/e-spar/#submission-details
2. Kluge H, Martín-Moreno JM, Emiroglu N, Rodier G, Kelley E, Vujnovic M, et al. Strengthening global health security by embedding the International Health Regulations requirements into national health systems. BMJ Glob Health. 2018;3(Suppl 1):e000656.
3. WHO. International Health Regulations (2005): State Party Self-assessment annual reporting tool, second edition. Geneva: World Health Organisation; 2021.