COUNTRY SCORE JUSTIFICATIONS AND REFERENCES

Spain

This document is a compilation of all questions, justifications, and sources used to determine the 2021 Global Health Security Index scores for Spain. For a category and indicator-level summary, please see the Country Profile for Spain.

CATEGORY 1: PREVENTING THE EMERGENCE OR RELEASE OF PATHOGENS WITH				
POTENTIAL FOR INTERNATIONAL CONCERN	4			
1.1 Antimicrobial resistance (AMR)	4			
1.2 Zoonotic disease	7			
1.3 Biosecurity	13			
1.4 Biosafety	20			
1.5 Dual-use research and culture of responsible science	22			
1.6 Immunization	25			
CATEGORY 2: EARLY DETECTION AND REPORTING FOR EPIDEMICS OF POTENTIAL				
INTERNATIONAL CONCERN	26			
2.1 Laboratory systems strength and quality	26			
2.2 Laboratory supply chains	29			
2.3 Real-time surveillance and reporting	31			
2.4 Surveillance data accessibility and transparency	34			
2.5 Case-based investigation	39			
2.6 Epidemiology workforce	43			
CATEGORY 3: RAPID RESPONSE TO AND MITIGATION OF THE SPREAD OF AN EPIDEMIC	45			
3.1 Emergency preparedness and response planning	45			
3.2 Exercising response plans	49			
3.3 Emergency response operation	52			
3.4 Linking public health and security authorities	54			
3.5 Risk communications	54			
3.6 Access to communications infrastructure	59			

www.ghsindex.org



3.7 Trade and travel restrictions	60
CATEGORY 4: SUFFICIENT AND ROBUST HEALTH SECTOR TO TREAT THE SICK AND PROTE HEALTH WORKERS	СТ 62
4.1 Health capacity in clinics, hospitals, and community care centers	62
4.2 Supply chain for health system and healthcare workers	65
4.3 Medical countermeasures and personnel deployment	70
4.4 Healthcare access	71
4.5 Communications with healthcare workers during a public health emergency	73
4.6 Infection control practices and availability of equipment	75
4.7 Capacity to test and approve new medical countermeasures	76
CATEGORY 5: COMMITMENTS TO IMPROVING NATIONAL CAPACITY, FINANCING PLANS ADDRESS GAPS, AND ADHERING TO GLOBAL NORMS	тО 78
5.1 International Health Regulations (IHR) reporting compliance and disaster risk reduction	78
5.2 Cross-border agreements on public health and animal health emergency response	79
5.3 International commitments	81
5.4 Joint External Evaluation (JEE) and Performance of Veterinary Services Pathway (PVS)	82
5.5 Financing	83
5.6 Commitment to sharing of genetic and biological data and specimens	87
CATEGORY 6: OVERALL RISK ENVIRONMENT AND VULNERABILITY TO BIOLOGICAL THREA	ATS 89

6.1 Political and security risk	89
6.2 Socio-economic resilience	92
6.3 Infrastructure adequacy	94
6.4 Environmental risks	95
6.5 Public health vulnerabilities	96



Category 1: Preventing the emergence or release of pathogens with potential for international concern

1.1 ANTIMICROBIAL RESISTANCE (AMR)

1.1.1 AMR surveillance, detection, and reporting

1.1.1a

Is there a national AMR plan for the surveillance, detection, and reporting of priority AMR pathogens?

Yes, there is evidence of an AMR plan, and it covers surveillance, detection, and reporting = 2, Yes, there is evidence of an AMR plan, but there is insufficient evidence that it covers surveillance, detection, and reporting = 1, No evidence of an AMR plan = 0

Current Year Score: 2

Spain has a national AMR plan in place for the surveillance, detection and reporting of priority AMR pathogens. The new Spanish National Plan Against Antibiotic Resistance 2019-2021 (Plan nacional frente a la resistencia de los antibióticos 2019-2021) is an update of the original plan released in 2014, with 6 core work areas: human and animal health; surveillance of antibiotics consumption; resistance control to antibiotics; prevention of necessity of antibiotic use; investigation of new antibiotics; training in matter of resistance and communication and awareness of the population. [1] Although detection of AMR pathogens is not one of the six core work areas, there are several measures and actios to explicitly improve detection such as: Action II.1.1. to "Identify and strengthen the setting up of a network of laboratories for early detection of new methods of detection and characterisation of AMR". [1] The reporting of consumption of antibiotics is done in the following areas: antibiotic consumption community sector and antibiotic consumption in hospitals, and then in antibiotic consumption by autonomous communities (Community or hospitals).[2] In addition, in June 2017, the European Commission adopted the One Health Action Plan against Antimicrobial Resistance, which supports the EU and its Member States (including Spain) in delivering innovative, effective and sustainable responses to AMR. [3]

[1] Spanish Agency of Medicines and Medical Devices (Agencia Española de Medicamentos y Productos Sanitarios). 2019.
 "National Plan against antibiotic resistance 2019-2021 (Plan nacional frente a la resistencia de los antibióticos 2019-2021)".
 [https://www.resistenciaantibioticos.es/es/system/files/field/files/pran_2019-

2021_0.pdf?file=1&type=node&id=497&force=0]. Accessed 3 December 2020.

[2] National Plan Against Antibiotic Resistance. Consumption Map.

[https://resistenciaantibioticos.es/es/profesionales/vigilancia/mapas-de-consumo]. Acessed 16 January 2021.

[3] European Commission. June 2017. "A European One Health Action Plan against Antimicrobial Resistance

(AMR)".[https://ec.europa.eu/health/sites/health/files/antimicrobial_resistance/docs/amr_2017_action-plan.pdf]. Accessed 16 January 2021.

1.1.1b

Is there a national laboratory/laboratory system which tests for priority AMR pathogens? All 7 + 1 priority pathogens = 2 , Yes, but not all 7+1 pathogens = 1 , No = 0

Current Year Score: 2

Spain has a national laboratory system which tests for 7+1 priority AMR pathogens. Spain's National Microbiology Centre (Centro Nacional de Microbiologia) works with a network of reference laboratories to contribute data to the European Antimicrobial Resistance Surveillance Network (EARS-Net) on e-coli, k pneumonia, s. aureus and s. pneumonia [1], and to the European Food Safety Authority on salmonella spp [2]. There is also evidence, from the Ministry of Science's Resolution of April 3rd 2019 which established the prices charged by Carlos III Institute for a range of 362 laboratorial tests that the laboratory can test for N. gonorrheae, Mycobacterium tuberculosis and Shigella [3]. Spain's network is made up of sentinel hospitals across the country, which, according to a research paper authored by the Spanish members of EARS-Net , collects data on "strands with large clinical impact and high capacity to develop resistance." [3] Data is sent quarterly to the National Microbiology Centre at the Carlos III Health Institute for analysis and then to EARS-Net. EARS-Net coverage in Spain is 14.6 million people, at 42 hospitals in 16 autonomous communities and includes 2 primary hospitals, 12 secondary and 28 tertiary hospitals. [4]

[1] European Centre for Disease Prevention & Control. 2018. "Surveillance of antimicrobial resistance in Europe. Annual report of the European Antimicrobial Resistance Surveillance Network (EARS-Net)."

[https://www.ecdc.europa.eu/sites/default/files/documents/surveillance-antimicrobial-resistance-Europe-2018.pdf]. Accessed 5 December 2020.

[2] National Plan on Antibiotic Resistance (Plan Nacional Resistencia Antibioticos). 2020. "Annual Report - 2019-2020 (Informe Anual-2019-2020)".

[https://www.resistenciaantibioticos.es/es/system/files/field/files/informe_anual_pran_2019_2020_0.pdf?file=1&type=node &id=577&force=0]. Accessed 5 December 2020.

[3] Official Bulletin (Boletín Oficial). 2019. "Resolution of April 3, 2019, of the Carlos III Health Institute, which establishes the public prices corresponding to the provision of services and activities (Resolución de 3 de abril de 2019, del Instituto de Salud Carlos III, por la que se establecen los precios públicos correspondientes a la prestación de servicios y actividades del organismo)". [https://www.boe.es/eli/es/res/2019/04/03/%287%29]. Accessed 26 November 2020

[4] Aracil-Garcia B et al. October 2017. "Rapid increase in resistance to 3rd generation cephalosporins, imipenem and coresistance in 7,140 Klebsiella pneumoniae isolates in blood cultures (2010-2014) according to EARS-Net data in Spain" (Rápido aumento de la resistencia a cefalosporinas de 3a generación, imipenem y de la corresistencia en 7.140 aislados de Klebsiella pneumoniae en hemocultivos (2010-2014) según datos de EARS-Net en España)". Enfermedades Infecciosas y Microbiología Clínica. Vol. 35 N. 8. [http://www.elsevier.es/es-revista-enfermedades-infecciosas-microbiologia-clinica-28articulo-rapido-aumento-resistencia-cefalosporinas-3a-

S0213005X16301537?code=ZTAQz1K7pbkrX8ewlv5oINH2uEJSWx&newsletter=true]. Accessed 6 December 2020.

1.1.1c

Does the government conduct environmental detection or surveillance activities (e.g., in soil, waterways) for antimicrobial residues or AMR organisms?

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Spain conducts detection or surveillance activities for antimicrobial residues or AMR organisms. There is evidence that the Ministry for Agriculture, Fisheries, Food & Environment participates in detection/surveillance activities on AMR in animals, but not in soil/water samples. [1] A part of the 2016-2017 progress report of the National Action Plan mentions the need for future research "determining the role played by the environment (water, soil, air) on the presence and transmission of resistance to antibiotics" but does not provide further information on the subject.[2] In Spain's National Plan Against Antibiotic Resistance 2019-2021 (Plan nacional frente a la resistencia de los antibióticos 2019-2021)" and in the Government Environmental Ministry (Ministerio para la transicion ecológica y ele reto demografico) there is no mention of environmental detection or surveillance activities in soil or water [3,4] There is no



additional information on detection or surveillance of AMR on the website of the Ministry of Health [5].

[1] Ministry of Agriculture, Fisheries & Food (Ministerio de Agricultura, Pesca y Alimentacion). "Antimicrobial resistance (Resistencias antimicrobianas)". [https://www.mapa.gob.es/es/ganaderia/temas/sanidad-animal-higiene-ganadera/sanidad-animal/zoonosis-resistencias-antimicrobianas/resistencias_antimicrobianas.aspx]. Accessed 3 December 2020.
[2] National Plan on Antibiotic Resistance (Plan Nacional Resistencia Antibioticos). 2017. ("Annual Report - 2016-2017" (Informe Anual - 2016-2017)". [http://www.resistenciaantibioticos.es/es/system/files/field/files/informe_anual_pran_2016-2017.pdf?file=1&type=node&id=441&force=0]. Accessed 17 January 2021.
[3] Spanish Agency of Medicines and Medical Devices (Agencia Española de Medicamentos y Productos Sanitarios). 2019. "Plan nacional frente a la resistencia de los antibióticos 2019-2021".[https://www.resistenciaantibioticos.es/es/system/files/field/files/pran_2019-2021".[https://www.resistenciaantibioticos.es/es/system/files/field/files/pran_2019-2021_0.pdf?file=1&type=node&id=497&force=0]. Accessed 3 December 2020.
[4] Ministry for the Ecological Transition and the Demographic Challenge (Ministerio para La Transición Ecológica Y el Reto Demografico). "Water (Agua)". [https://www.miteco.gob.es/es/agua/temas/default.aspx]. Accessed 3 December 2020.
[5] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social").

[https://www.mscbs.gob.es/en/] Accessed 3 December 2020.

1.1.2 Antimicrobial control

1.1.2a

Is there national legislation or regulation in place requiring prescriptions for antibiotic use for humans? Yes = 2 , Yes, but there is evidence of gaps in enforcement = 1 , No = 0

Current Year Score: 1

Spain has national legislation in place requiring prescriptions for antibiotic use for humans, but there is evidence of gaps in enforcement. Law 29/2006 on the safe and rational use of medications and health products (Ley 29/2006 de 26 de julio, de garantías y uso racional de los medicamentos y productos sanitarios) mentions that antibiotic require a prescription, and there are penalties for failing to abide by the law. These penalties include fines and in severe cases may lead to disqualification of the pharmacy involved to dispense prescriptions of the National Health System for a minimum period of 3 months and a maximum of 1 year. [1] Enforcement is lax, since there are still situations of irregularities due to lack of prescriptions. Evidence of such irregularities are found in studies published by the National Pharmacy Association in 2018 on the size and scale of antibiotic dispensation without prescription; and legislation passed by the Ministry of Health in 2017 to carry-out studies to better understand the nature of antibiotic dispensation without prescription. [2,3]

[1] Official Bulletin (Boletín Oficial). 26 July 2006. "Law 29/2006 on the safe and rational use of medications and health products (Ley 29/2006 de 26 de julio, de garantías y uso racional de los medicamentos y productos sanitarios)".
[https://www.boe.es/buscar/pdf/2006/BOE-A-2006-13554-consolidado.pdf]. Accessed 10 December 2020.
[2] Official Bulletin (Boletin Oficial). 14 December 2017. "Resolution of the General Secretariat of Health and Consumers, publishing the Agreement between the Spanish Agency for Medicines and Health Products and the Spanish Society of Family and Community Pharmacy, through which the subsidy is established in the General State Budgets for the year 2017 for the realization of the studies and analysis of the demand data of antibiotics with private prescription, irregular prescription and without prescription (Resolución de 14 de diciembre de 2017, de la Secretaría General de Sanidad y Consumo, por la que se publica el Convenio entre la Agencia Española de Medicamentos y Productos Sanitarios y la Sociedad Española de Farmacia Familiar y Comunitaria, por el que se canaliza la subvención nominativa establecida en los Presupuestos Generales del Estado para el año 2017 para la realización de los estudios y análisis de los datos de demanda de antibióticos con receta privada, prescripción irregular y sin prescripción)". [https://www.boe.es/diario_boe/txt.php?id=BOE-A-2017-15821] Accessed 10



December 2020.

[3] Farmaceuticos comunitarios. 30 March 2018." Analysis of the demand for antibiotics in community pharmacy with private prescription, irregular prescription and without prescription (self-medication): profile of the participating pharmacies and community pharmacists (Análisis de la demanda de antibióticos en farmacia comunitaria con receta privada, prescripción irregular y sin receta (automedicación):perfil de las farmacias y los farmacéuticos comunitarios participantes)". [https://www.farmaceuticoscomunitarios.org/es/journal-article/analisis-demanda-antibioticos-farmacia-comunitaria-con-receta-privada-prescripcion]. Accessed 10 December 2020.

1.1.2b

Is there national legislation or regulation in place requiring prescriptions for antibiotic use for animals? Yes = 2, Yes, but there is evidence of gaps in enforcement = 1, No = 0

Current Year Score: 2

Spain has national legislation in place requiring prescriptions for antibiotic use, with electronic prescription for animals since 2019, showing that is not posssible to buy antibiotics without prescriptions. Law 29/2006 on the safe and rational use of medications and health products ("Ley 29/2006 de 26 de julio, de garantías y uso racional de los medicamentos y productos sanitarios"), includes regulation for antibiotics use for animals and humans. [1] Legislation is being enforced and since January 2019 there is regulation for the electronic prescription of antibiotics in livestock. There is no evidence that is possible to buy antibiotics for animals without prescription. [2,3]

[1] Official Bulletin (Boletín Oficial). 26 July 2006. "Law 29/2006 on the safe and rational use of medications and health products (Ley 29/2006 de 26 de julio, de garantías y uso racional de los medicamentos y productos sanitarios)".
[https://www.boe.es/buscar/pdf/2006/BOE-A-2006-13554-consolidado.pdf]. Accessed 10 December 2020
[2] National Plan on Antibiotic Resistance. 6 April 2018. "Joint Inter-agency Antimicrobial Consumption and Resistance Analysis Report: Spain (Informe JIACRA España)".
[http://www.resistenciaantibioticos.es/es/system/files/field/files/informe_jiacra-espana.pdf?file=1&type=node&id=410&force=0] Accessed 10 December 2020
[3] Spanish Government. Plan Nacional Resistencia Antibioticos. 27 April 2018." The new regulations for the electronic prescription of antibiotics in livestock will enter into force in January 2019".
[https://www.resistenciaantibioticos.es/es/noticias/la-nueva-normativa-para-la-prescripcion-electronica-de-antibioticos-enganaderia-entrara-en] Accessed 10 December 2020

1.2 ZOONOTIC DISEASE

1.2.1 National planning for zoonotic diseases/pathogens

1.2.1a

Is there national legislation, plans, or equivalent strategy documents on zoonotic disease?

Yes = 1 , No = 0

Current Year Score: 1

Spain has national legislation on zoonotic diseases. Decree 1940/2004 regulates the surveillance of zoonosis and zoonotic agents in all the country, and designates: the Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion) for overseeing, coordinating and analysing the surveillance work of the Autonomous Communities on zoonosis in animal food products and live animals (except those suspected of rabies); and the Spanish Agency for Consumption, Food

Safety and Nutrition (Agencia Española de Consumo, Seguridad Alimentaria y Nutrición, AECOSAN) for zoonosis transmited by food designated to human consumption. [1,2] Decree 526/2014 establishes the list of notifiable animal diseases and regulates their notification. In addition, the Ministry of Agriculture's Zoonosis Program has in place individual surveillance and control strategies on rabies, salmonella, transmissible spongiform encephalopathies (TSEs) and triquinosis, based on separate contingency plans, in the case of rabies and triquinosis, and national-level regulation in the case of TSEs. [1] In addition, Spain adheres to EU Council Directive 2003/99/EC on zoonotic disease, which requires data collection on human and animal incidences of zoonotic diseases. [3]

[1] Spanish Government. Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). "Zoonosis (Zoonosis) ". [https://www.mapa.gob.es/es/ganaderia/temas/sanidad-animal-higiene-ganadera/sanidadanimal/zoonosis-resistencias-antimicrobianas/zoonosis.aspx] Accessed 10 December 2020.

[2] Spanish Agency for Consumption, Food Safety and Nutrition (Agencia Española de Consumo, Seguridad Alimentaria y Nutrición, AECOSAN. "Zoonosis surveillance (Vigilancia zoonosis)".

[http://www.aecosan.msssi.gob.es/AECOSAN/web/seguridad_alimentaria/subseccion/vigilancia_zoonosis.htm] Accessed 10 December 2020.

[3] European Union. 17 November 2003. "Directive 2003/99/EC of the European Parliament and of the Council of 17 November 2003 on the monitoring of zoonoses and zoonotic agents, amending Council Decision 90/424/EEC and repealing Council Directive 92/117/EEC". [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32003L0099]. Accessed 10 December 2020.

1.2.1b

Is there national legislation, plans or equivalent strategy document(s) which includes measures for risk identification and reduction for zoonotic disease spillover events from animals to humans?

Yes = 1 , No = 0

Current Year Score: 0

Spain does not have national legislation or plans to identify pathways for transmission of zoonosis diseases from animals to human. Spain has several pieces of legislation, studies and plans on zoonotic diseases which include surveilance and control measures to prevent spillover from animals to humans, such as "Decree 1940/2004 on the Surveillance of Zoonosis and Zoonotic Agents"; the "Annual Report on Trends and Sources of Zoonoses and Zoonotic Agents in Foddstuffs, Animals and Feedingstuffs"; the "Annual Coordination Plan for Animal Health Alerts", or information from Spainish Zoonotic Agency [1,2,3,4,5]. These documents focus on food safety, human saftey, monitoring systems for known diseases and control mesaures to prevent spillovers, however there is lack of evidence of studies or plans assessing risks of spillovers of diseases from animals to humans and where such exposure may happen, such as sanitary or testing measures introduced at markets where wild animals are bought/sold or efforts designed to preserve boundaries between humans and wildlife. There is also no evidence of risk assessment of diseases spilling over from animals to humans on the websites of the Ministry of Health or Ministry of Agriculture [6,7]

[1] Official Bulletin (Boletin Oficial). 1 October 2004. "Decree on the surveillance of zoonosis and zoonotic agents. (Real Decreto 1940/2004, de 27 de septiembre, sobre la vigilancia de las zoonosis y los agentes zoonóticos)".

[https://www.boe.es/boe/dias/2004/10/01/pdfs/A32772-32777.pdf] Accessed 18 December 2020.

[2] Consumer Ministry (Ministerio de Consumo). " Surveillance of Zoonoses and Zoonotic Agents (Vigilancia de Zoonosis y Agentes Zoonóticos)".

[https://www.aesan.gob.es/AECOSAN/web/seguridad_alimentaria/subseccion/vigilancia_zoonosis.htm]. Accessed 18 December 2020.

[3] Ministry of Agriculture (Ministro de Agricultura). 2019. "Annual Coordination Plan for Animal Health Alerts (Plan

Coordenado Estatal de Alerta Sanitaria Veterinaria)". [https://www.mapa.gob.es/ca/ganaderia/temas/sanidad-animalhigiene-ganadera-nueva/plan_coordinado_estatal_alerta_sanitaria_veterinaria_enero2019_tcm34-111067.pdf]. Accessed 27 May 2021

[4] Ministry of Agriculture (Ministro de Agricultura). 2019. "Trends and Sources of Zoonoses and Zoonotic Agents in Foddstuffs, Animals and Feedingstuffs".[https://www.mapa.gob.es/es/ganaderia/temas/sanidad-animal-higiene-ganadera/spainannualnationalreport2019 tcm30-551455.pdf]. Accessed 18 December 2020.

[5] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). "Zoonosis (Zoonosis)". [https://www.mapa.gob.es/es/ganaderia/temas/sanidad-animal-higiene-ganadera/sanidad-animal/zoonosis-resistenciasantimicrobianas/zoonosis.aspx] Accessed 18 December 2020.

[6] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). [https://www.mscbs.gob.es/en/]. Accessed 12 December 2020

[7] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). [https://www.mapa.gob.es/]. Accessed 12 December 2020

1.2.1c

Is there national legislation, plans, or guidelines that account for the surveillance and control of multiple zoonotic pathogens of public health concern?

Yes = 1 , No = 0

Current Year Score: 1

In Spain there is national legislation or plans that account for the surveillance and control of multiple zoonotic pathogens of public health concern, including the permanent surveillance of eight zoonoses, and the control of four zoonoses (TSEs, rabies, triquinosis and salmonella). On surveillance, in line with EU Directive 2003/99/EC, Spain's Decree 526/2014 establishes the surveillance of zoonoses and zoonotic agents broadly, whereby in the Spain's Zoonoses Annual Reports from the Ministry of Agriculture, there are plans for surveillance and control of multiple zoonotic diseases that are broken down into two categories: i) zoonoses under permanent surveillance (brucellosis, salmonella, campilobacteriosis, listeriosis, equinoccosis, triquinosis, tuberculosis by mycobacterium bovis and E.coli); ii) zoonoses under surveillance during epidemiological situations (viral zoonoses, such as calicivirus, Hepatitis A, flu, rabies; bacterial zoonoses such as borreliosis, botulism, etc; parasitic zoonoses such as anisakis, toxoplasma, etc). [2,3]

On control, Spain has in place individual surveillance and control strategies on salmonella, rabies, triquinosis and transmissible spongiform encephalopathies (TSEs). [2] These are managed by the Ministry of Agriculture and, in the case of TSEs, is governed by individual regulation and, in the case of rabies and triquinosis, by national contingency plans in line with EU regulations. The regulation on the surveillance and control of TSEs established the "Integral Coordinated Program on the Surveillance and Control of TSEs in Animals" which specifies the control of substances in animal feedstock and inspections of slaughter houses, among others. [1] Zoonoses reports from the Ministry of Agriculture outline the monitoring systems in place and the prevention and control strategies applied in the country to reduce disease spillovers from animals to humans. [1,2]

[1] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). "Zoonosis (Zoonosis) ". [https://www.mapa.gob.es/es/ganaderia/temas/sanidad-animal-higiene-ganadera/sanidad-animal/zoonosis-resistenciasantimicrobianas/zoonosis.aspx] Accessed 18 December 2020.

[2] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). 2019. "Trends and Sources of Zoonoses and Zoonotic Agents in Foddstuffs, Animals and Feedingstuffs".

[https://www.mapa.gob.es/es/ganaderia/temas/sanidad-animal-higiene-ganadera/spainannualnationalreport2019_tcm30-551455.pdf]. Accessed 18 December 2020

[3] Official Bulletin (Boletin Oficial). 10 July 2014. "Decree 526/2014 that establishes the list of animal diseases of mandatory

surveillance and notification (Real Decreto 526/2014, de 20 de junio, por el que se establece la lista de las enfermedades de los animales de declaración obligatoria y se regula su notificación)". [https://www.boe.es/boe/dias/2014/07/10/pdfs/BOE-A-2014-7291.pdf]. Accessed 18 December 2020

1.2.1d

Is there a department, agency, or similar unit dedicated to zoonotic disease that functions across ministries? Yes = 1, No = 0

Current Year Score: 0

Spain does not have a department, agency or similar unit dedicated to zoonotic disease that functions across ministries. The relevant authrorities on zoonosis are established in the decree 1940/2004 as follows: i) Ministry of Agriculture, Fisheries and Food for zoonosis transmitted via animal feed and by livestock, with the exception of rabies; ii) Spanish Agency for Food Safety for zoonosis transmitted via food destined for human consumption; iii) Ministry of Health, Consumption and Social Welfare for zoonosis in humans and animals suspected of having rabies. [1] There is no evidence on the websites of the Ministry of Health or Ministry of Agriculture about the existence of an interagency unit to coordinate these function. [2,3]

 [1] Official Bulletin. Boletin Oficial). 1 October 2004. "Decree 1940/2004, on the surveillance of zoonosis and zoonotic agents (Real Decreto 1940/2004, de 27 de septiembre, sobre la vigilancia de las zoonosis y los agentes zoonóticos)".
 [https://www.boe.es/boe/dias/2004/10/01/pdfs/A32772-32777.pdf]. Accessed 12 December 2020

[2] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social).

[https://www.mscbs.gob.es/en/]. Accessed 12 December 2020

[3] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). [https://www.mapa.gob.es/]. Accessed 12 December 2020

1.2.2 Surveillance systems for zoonotic diseases/pathogens

1.2.2a

Does the country have a national mechanism (either voluntary or mandatory) for owners of livestock to conduct and report on disease surveillance to a central government agency?

Yes = 1 , No = 0

Current Year Score: 1

Spain has a national mechanism for owners of livestock to conduct and report on disease surveillance to a central government agency. In Spain, the protocol to report zoonotic diseases falls under the general protocol for the "Mandatory Reporting of Diseases" ("Enfermedades de Declaration Obligatoria" or EDO), under National Decree 526/2014. [1,2] Each Spanish department and Autonomous Community has its own reporting mechanism, including emergency hotlines and portals and they need to report individual diseases per 100.000 habitants. [2,3] National Decree 526/2014 establishes the list of zoonoses and zoonotic agents that fall under mandatory reporting requirements (EDO) and regulates the notification procedures. The decree requires the relevant authority (public health department) in each department/Autonomous Community to notify the Spanish Ministry of Agriculture, Food and Environment, through the General Sanitation Directorate for Agricultural Production, which is then authorized to coordinate measures to prevent or spread the contagion, including restrictions on slaughter and animal husbandry. It is also responsible for notifying the World Organisation for Animal Health and relevant EU authorities. [1] Example of reporting requirements for livestock owners, are regulation on livestock transportation, which mandates owners to ensure and report that sanitary conditions are met before the animals can be



transferred from their facilities. [1]

[1] Official Bulletin (Boletin Oficial). 20 June 2014. "Decree 526/2014 that establishes the mandatory reporting of animal diseases and regulates notification (Real Decreto 526/2014, de 20 de junio, por el que se establece la lista de las enfermedades de los animales de declaración obligatoria y se regula su notificación)".

[https://www.boe.es/buscar/pdf/2014/BOE-A-2014-7291-consolidado.pdf]. Accessed 12 December 2020.
[2] Ministry of Science, Innovation and Universities (Ministerio de Ciencia, Innovation Y Universidades). 2018. Centro Nacional de Epidemologia. " Compulsory Declaration Diseases. Cases Notified by Autonomous Communities and rates per 100.000 inhabitants.Spain 2018 (Enfermedades de Declaración Obligatoria. Casos Notificados por Comunidades Autónomas Y Tasas por 100.000 Habitantes. Españã 2018.)"

[https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/EnfermedadesTransmisibles/Documents/INFOR MES/INFORMES%20RENAVE/RENAVE_cierre_EDO_2018.pdf]. Accessed 12 December 2020.

[3] Rioja Department of Health (Rioja Salud). Undated. "Surveillance of Mandatory Reporting of Diseases") (Vigilancia de Enfermedades de Declaración Obligatoria (EDOs). [https://www.riojasalud.es/profesionales/epidemiologia/vigilancia-de-enfermedades-de-declaracion-obligatoria-edo] Accessed 12 December 2020.

1.2.2b

Is there legislation and/or regulations that safeguard the confidentiality of information generated through surveillance activities for animals (for owners)?

Yes = 1 , No = 0

Current Year Score: 0

In Spain there is no publicly available evidence about laws or guidelines that safeguard the confidenciality of information generated through surveillance activities for animals (for owners). Spain is under EU regulation 2016/679 "on the protection of natural persons with regard to the processing of personal data and on the free movement of such data". Article 9 creates explicit provisions for data obtained for public health studies, but there are no explicit mention of animal health. [1] Spanish Decree 1940/2004 on the surveillance of zoonosis and zoonotic agents, there is no information on that on the surveillance of zoonotic diseases or in the Ministry of Agriculture or Ministry of Health. [2,3,4].

[1] European Parliament. "EU Regulation 2016/679 of April 27th 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)". [https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L:2016:119:FULL&from=EN].
 Accessed 27 December 2020

[2] Official Bulletin. 27 September 2004. "Decree 1940/2004 on the surveillance of zoonosis and zoonotic agents (Real Decreto 1940/2004, de 27 de septiembre, sobre la vigilancia de las zoonosis y los agentes zoonóticos.) ".

[https://www.boe.es/boe/dias/2004/10/01/pdfs/A32772-32777.pdf]Accessed 12 December 2020.

[3] Ministry of Agriculture. "Zoonosis" [https://www.mapa.gob.es/es/ganaderia/temas/sanidad-animal-higiene-

ganadera/sanidad-animal/zoonosis-resistencias-antimicrobianas/zoonosis.aspx] Accessed 12 December 2020.

[4] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). [https://www.mscbs.gob.es/en/] Accessed 12 December 2020.

1.2.2c

Does the country conduct surveillance of zoonotic disease in wildlife (e.g., wild animals, insects, other disease vectors)? Yes = 1, No = 0



Current Year Score: 1

Spain conducts surveillance of zoonotic disease in wildlife. The Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion) and the Ministry of Health (Ministerio de Sanidad) are the two entities that conduct active and passive surveillance of wildlife on various zoonotic diseases. The Subdirectorate General for Animal Health and Hygiene and Traceability (Subdirección General de Sanidad e Higiene Animal y Trazabilidad, SGSHAT) periodically reviews the evolution of the Plan on Sanitation Surveillance of Wildlife, Fisheries and Food ((Plan nacional de vigilancia sanitaria en fauna silvestre), and proposes modifications and changes necessary for the effective fulfillment of the objectives. [1] Example of animals and zoonotic diseases under surveillance: lagomorphs (for myxomatosis, haemorrhagic virus, tularaemia); wild boar (for bovine TB, brucellosis); bovidae (for pestivirosis, brucellosis, sarcoptic mange); and carnivores including foxes and wolves (for bovine TB, moquillo), among others. The Plan on Sanitation Surveillance of Wildlife is tasked with coordinating with additional entities within the Ministry of Agriculture for the surveillance of birds (for avian flu, West Nile Virus) and wild boar (for Classic and African swine flu, Aujeszky disease and vesicular disease). In addition, the Plan on Sanitation Surveillance of Wildlife coordinates with the Ministry of Health for the surveillance of triquinelosis in wild boar and of rabies in carnivores. [1]

[1] Ministry of Agriculture. January 2020. "Plan on Sanitation Surveillance of Wildlife, Fisheries and Food (Plan nacional de vigilancia sanitaria en fauna silvestre)". [https://www.mapa.gob.es/es/ganaderia/temas/sanidad-animal-higiene-ganadera/pvfs2020_tcm30-437517.pdf]. Accessed 12 December 2020.

1.2.3 International reporting of animal disease outbreaks

1.2.3a

Has the country submitted a report to OIE on the incidence of human cases of zoonotic disease for the last calendar year? Yes = 1, No = 0

Current Year Score: 0

2019

OIE WAHIS database

1.2.4 Animal health workforce

1.2.4a

Number of veterinarians per 100,000 people Input number Current Year Score: 113.93

2019

OIE WAHIS database

1.2.4b

Number of veterinary para-professionals per 100,000 people



Input number

Current Year Score: -

No data available

OIE WAHIS database

1.2.5 Private sector and zoonotic

1.2.5a

Does the national plan on zoonotic disease or other legislation, regulations, or plans include mechanisms for working with the private sector in controlling or responding to zoonoses?

Yes = 1 , No = 0

Current Year Score: 0

In Spain there is no publicly available evidence of mechanisms in place for working with the private sector in controlling or responding to zoonoses. Decree 1940/2004 on the surveillance of zoonosis and zoonotic agents doesn't provide any evidence on mechanisms for working with the private sector in controlling zoonoses. [1] In the Ministry of Health's website, the Ministry of Agriculture's page on zoonosis or on the website of the Carlos III Health Institute, no relevant information could be found on colaboration with the private sector. [2,3,4]

Official Bulletin. 27 September 2004. "Decree 1940/2004 on the surveillance of zoonosis and zoonotic agents (Real Decreto 1940/2004, de 27 de septiembre, sobre la vigilancia de las zoonosisy los agentes zoonóticos)".
 [https://www.boe.es/boe/dias/2004/10/01/pdfs/A32772-32777.pdf] Accessed 14 December 2020.
 [2] Ministry of Agriculture. "Zoonosis." [https://www.mapa.gob.es/es/ganaderia/temas/sanidad-animal-higiene-ganadera/sanidad-animal/zoonosis-resistencias-antimicrobianas/zoonosis.aspx] Accessed 14 December 2020.
 [3] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social).
 [https://www.mscbs.gob.es/en/] Accessed 14 December 2020.
 [4] Carlos III Health Institute (Instituto de Salud Carlos III). [http://www.isciii.es/] Accessed 14 December 2020.

1.3 BIOSECURITY

1.3.1 Whole-of- government biosecurity systems

1.3.1a

Does the country have in place a record, updated within the past five years, of the facilities in which especially dangerous pathogens and toxins are stored or processed, including details on inventories and inventory management systems of those facilities?

Yes = 1 , No = 0

Current Year Score: 1

In Spain, there is evidence of a national record of the facilities in which especially dangerous pathogens and toxins are stored or processed. Order PCI/168/2019 from 22nd February 2019, published the National Biosecurity Plan, approved by the National Security Council [1,2]. The Plan aims to develop all those necessary measures that enable effective custody of relevant biological agents, controlling their access and the physical protection of the facilities where these agents are handled, as well as their safe transportation. In addition, gives power to the National Security Council to supervise and

execute the National Plan of Biosecurity. [1,2] The High Biosecurity Laboratory Network holds records of pathogens and are classified as NCB3, NCB3+ and NCB4 installations [1]. There are two research centers: CISA (Centro de Investigación en sanidad animal, in Madrid) that is a NCB3 and NCB3+ facility, and has dedicated teams handling West Nile Virus, Rift Valley Virus, African Swine Flu, Bluetongue disease, Swine vesicular disease, Teschen-Talfan disease, Haemorrhagic Viral Septicemia, Infectious Pancreatic Necrosis, SARS, as well as spongiform encephalopathy) [1,3]; and the Animal Health Research Centre in Catalonia (Centre de Recerca en Sanitat Animal, CReSA) is located on the campus of the University of Barcelona and has NBS3 and NBS3+ installations and conducts experiments on zoonotic pathogens including West Nile Virus, Rift Valley Fever virus, H5N1 and MERS) and also has the capacity for NBS4Ag. [3,4] There is no publicly available evidence that it has details on precise inventories and inventory management systems in those facilities, however, no additional evidence of other facilities holding pathogens could be located. Spain submits Confidence Building Measures on an annual basis, access to the reports is restricted to the public, and it is unknown if they contain information on this matter. [5]

Boletin Oficial del Estado (Official State Bulletin). 23 February 2019. "Orden PCI/168/2019, de 22 de febrero, por la que se publica el Plan Nacional de Biocustodia, aprobado por el Consejo de Seguridad Nacional (Order PCI/168/2019, of 22 of February, on the publication of the National Biosecurity Plan, approved by the National Security Commission."
 [https://www.boe.es/boe/dias/2019/02/23/pdfs/BOE-A-2019-2553.pdf]. Accessed 14 December 2020.
 [2] Spanish Government. National Security Department. "National Biosecurity Plan (Plan Nacional de Biocustodia)". [https://www.dsn.gob.es/es/actualidad/sala-prensa/plan-nacional-biocustodia#:~:text=El%20Plan%20Nacional%20de%20Biocustodia%2C%20seg%C3%BAn%20indica%20en%20la%20propia,cu stodia%20efectiva%20de%20agentes%20biol%C3%B3gicos] Accessed 14 December 2020.
 [3] Red de Laboratorios de Alta Seguridad Biológica (High Biosecurity Laboratory Network). [http://www.rlasb.es/] Accessed 14 December 2020.

[4] Ministry of Economy and Competitiveness (Ministerio de Economy y Competitividad). Undated. "Infrastructure of "Singular Scientific-Technical Installations" (ICTs) by Research Area" ("Infraestructuras de la MAPA de ICTS por Areas").
[http://www.ciencia.gob.es/stfls/MICINN/Innovacion/FICHEROS/ICTS_esp.pdf] Accessed 14 December 2020.
[5]. BWC. "Spain". [https://bwc-ecbm.unog.ch/state/spain] Accessed 14 December 2020.

1.3.1b

Does the country have in place legislation and/or regulations related to biosecurity which address requirements such as physical containment, operation practices, failure reporting systems, and/or cybersecurity of facilities in which especially dangerous pathogens and toxins are stored or processed?

Yes = 1 , No = 0

Current Year Score: 0

In Spain, there is no public evidence of legislation or regulations related to biosecurity which address requirements such as physical containment, operation practices, failure reporting systems, and/or cybersecurity of facilities in which especially dangerous pathogens and toxins are stored or processed. Since February 2019, there is a national biosecurity plan, but this plan does not include information for the security of facilites housing pathogens. [1] The only regulation addressing biosecurity is the rule creating the Biological Alert Laboratory Network (RE-LAB), which establishes a scientific-technical network made up of reference laboratories in order to give operational support to the National Response System on Crises in case of dangerous biological risks or threats. The rule does not address issues of physical containment, operation practices, failure reporting or cybersecurity of facilities where toxins are stored or processed. [3] Spain submits Confidence Building Measures on an annual basis, access to the reports is restricted to the public, and it is unknown if they contain information on this matter. [4] There is no evidence of other legislation or regulations on the VERTIC database, Ministry of Agriculture, Ministry of Health, Consumption and Social Welfare or in Carlos III Health Institute [2,5,6,7].

[1] Official Bulletin (Boletin Oficial). 23 February 2019. "(Order PCI/168/2019, of 22 of February, on the publication of the National Biosecurity Plan, approved by the National Security Commission (Orden PCI/168/2019, de 22 de febrero, por la que se publica el Plan Nacional de Biocustodia, aprobado por el Consejo de Seguridad Nacional)".

[https://www.boe.es/boe/dias/2019/02/23/pdfs/BOE-A-2019-2553.pdf]. Accessed 15 December 2020.

[2] VERTIC Biological weapons and materials legislation database. [https://www.vertic.org/programmes/biological-weaponsand-materials/bwc-legislation-database/s/]. Accessed 16 January 2021.

[3] VERTIC Biological weapons and materials legislation database. 10 February 2009. "Rule PRE/305/2009 that creates the Biological Alert Laboratory Network, RE-LAB (Orden PRE/305/2009, de 10 de febrero, por la que se crea la Red de Laboratorios de Alerta Biológica, RE-LAB)".

[http://www.vertic.org/media/National%20Legislation/Spain/SP_Red_Laboratorios_Alerta_Biologica.pdf]. Accessed 15 December 2020.

[4] Confidence Building Measures (BWC). "Spain". [https://bwc-ecbm.unog.ch/state/spain]. Accessed 15 December 2020.[5] Ministry of Agriculture. [https://www.mapa.gob.es/es/]. Accessed 16 January 2021.

[6] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). [https://www.mscbs.gob.es/en/]. Accessed 16 January 2021.

[7] Carlos III Health Institute (Instituto de Salud Carlos III). [http://www.isciii.es/]. Accessed 16 January 2021.

1.3.1c

Is there an established agency (or agencies) responsible for the enforcement of biosecurity legislation and regulations? Yes = 1, No = 0

Current Year Score: 0

There is no evidence of an agency responsible for the enforcement of legislation or regulations on biosecurity. Order PCI/168/2019 on the National Biosecurity Plan (Plan Nacional de Biocustodia) covers the creation of a national inventory system, implementing a transportation security system for pathogens and intangible data about pathogens and the creation of a National Commission for Biosecurity. The National Commission for Biosecurity is tasked with proposing and developing biosecurity regulations. [1] The national biosecurity plan from February 2019 does not include information for the security of facilities housing pathogens. There is no further evidence of agencies responsible for enforcement of biosecurity legislation or regulations on the VERTIC database [2]. There is no additional information available either on the website of the Ministry of Health, Ministry of Agriculture, Ministry of Defence or in Carlos III Health Institute [3,4,5,6]. There is evidence of agencies responsible for enforcement of biosafety, however no agencies for biosecurity. Finally, although Spain submits Confidence Building Measures on an annual basis, access to the reports is restricted to the public, and it is unknown if they contain information on this matter. [7]

[1] Official Bulletin (Boletin Oficial). 23 February 2019. " (Order PCI/168/2019, of 22 of February, on the publication of the National Biosecurity Plan, approved by the National Security Commission (Orden PCI/168/2019, de 22 de febrero, por la que se publica el Plan Nacional de Biocustodia, aprobado por el Consejo de Seguridad Nacional)"

[https://www.boe.es/boe/dias/2019/02/23/pdfs/BOE-A-2019-2553.p df]. Accessed 15 December 2020.

[2] VERTIC Biological weapons and materials legislation database. https://www.vertic.org/programmes/biological-weaponsand-materials/bwc-legislation-database/s/]. Accessed 19 January 2021.

[3] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social).

[https://www.mscbs.gob.es/en/]. Accessed 15 December 2020.

[4] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). [https://www.mapa.gob.es/]. Accessed 15 December 2020.

[5] Ministry of Defence (Ministerio de Defensa). [www.dsn.gob.es]. Accessed 15 December 2020.

[6] Carlos III Health Institute (Instituto de Salud Carlos III). [http://www.isciii.es/] Accessed 14 December 2020.



[6]. BWC. "Spain". [https://bwc-ecbm.unog.ch/state/spain]. Accessed 15December 2020.

1.3.1d

Is there public evidence that shows that the country has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities?

Yes = 1 , No = 0

Current Year Score: 0

In Spain there is no publicly available evidence that actions were taken to consolidate its inventories of dangerous pathogens into a minimum number of facilities. No such evidence of inventory consolidation is available via Order PCI/168/2019 on the National Biosecurity Plan (Plan Nacional de Biocustodia) [1]. No information could be found on the websites of the VERTIC database, the Ministry of Health, Ministry of Agriculture, Ministry of Defence, Ministry of Foreign Affairs, Carlos III Health Institute (home to the national reference laboratory system) and the Ministry of Science, Innovation and Universities. [2,3,4,5,6,7]. Spain submits Confidence Building Measures on an annual basis, but access to the reports is restricted to the public, and it is unknown if they contain information on this matter [8]

[1] Official Bulletin (Boletin Oficial). 23 February 2019. "Order PCI/168/2019, of 22 of February, on the publication of the National Biosecurity Plan, approved by the National Security Commission (Orden PCI/168/2019, de 22 de febrero, por la que se publica el Plan Nacional de Biocustodia, aprobado por el Consejo de Seguridad Nacional)".

[https://www.boe.es/boe/dias/2019/02/23/pdfs/BOE-A-2019-2553.pdf]. Accessed 15 December 2020.

[2] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social).

[https://www.mscbs.gob.es/en/] Accessed 15 December 2020.

[3] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). [https://www.mapa.gob.es/] Accessed 15 December 2020.

[4] Ministry of Foreign Affairs (Ministerio de Asuntos Exteriores).

[http://www.exteriores.gob.es/Portal/en/Paginas/inicio.aspx] Accessed 15 December 2020.

[5] Institute of Health Carlos III (Instituto de Salud Carlos III) [http://www.isciii.es/] Accessed 15 December 2020.

[6] Ministry of Science, Innovation and Universities (Ministerio de Ciencias, Innovacion y Universidades).

[http://www.ciencia.gob.es/] Accessed 15 December 2020.

[7] VERTIC Biological weapons and materials legislation database. [https://www.vertic.org/programmes/biological-weaponsand-materials/bwc-legislation-database/s/]. Accessed 19 January 2021.

[8] BWC. "Spain". [https://bwc-ecbm.unog.ch/state/spain] Accessed 15 December 2020

1.3.1e

Is there public evidence of in-country capacity to conduct Polymerase Chain Reaction (PCR)—based diagnostic testing for anthrax and/or Ebola, which would preclude culturing a live pathogen?

Yes = 1 , No = 0

Current Year Score: 1

Spain has the capacity to conduct real time PCR-based testing for both Ebola and anthrax. Spain's National Microbiology Centre (Centro Nacional de Microbiologia), part of the Carlos III Health Institute, is the reference laboratory in Spain for infectious diseases and biologic pathogens. [1] Blood samples are tested across the country's laboratories, some with PCR testing capabilities, and then sent to the National Centre for Microbiology for verification with real time PCR testing.[2] The Ministry of Science's Resolution of April 3rd 2019 established the prices charged by the Institute for a range of 362 laboratorial tests, including Polymerase Chain Reaction (PCR) testing for Ebola and also for anthrax. [2] Additional evidence of

capabilities to perform PCR tests for ebola and anhrax in Spain can be found in several documents, such as: the 2020 Clinical Microbiology Procedures from the National Mecrobiology Centre which outlines the tests to be carried-out for detecting especially dangerous pathogens including PCR tests for ebola and anthrax; or in the Ministry of Health 2015 report on the "Risk assessment for Spain of the epidemic of hemorrhagic fever due to the virus Ebola in West Africa" which descbribes PCR testing procedures with for suspected Ebola cases in Spain. [3,4]

 National Center of Microbiology (Centro Nacional de Microbiologia), "National Center of Microbiology - Reference Laboratories (Centro Nacional de Microbiologia - Laboratorios de Referencia e Investigación y Unidades de Apoyo)".
 [https://www.isciii.es/QuienesSomos/CentrosPropios/CNM/Paginas/default.aspx]. Accessed 26 November 2020
 [2] Official Bulletin (Boletín Oficial). 2019. "Resolution of April 3, 2019, of the Carlos III Health Institute, which establishes the public prices corresponding to the provision of services and activities (Resolución de 3 de abril de 2019, del Instituto de Salud Carlos III, por la que se establecen los precios públicos correspondientes a la prestación de servicios y actividades del organismo)". [https://www.boe.es/eli/es/res/2019/04/03/%287%29]. Accessed 26 November 2020
 [3] National Microbiology Centre (Centro Nacional de Microbiologia). 2020. " Clinical Microbiology Procedures

(Procedimientos en Microbiología Clínica)". pp19.

[https://seimc.org/contenidos/documentoscientificos/procedimientosmicrobiologia/seimc-

procedimientomicrobiologia67.pdf]. Accessed 19 January 2021

[4] Ministry of Health (Ministerio de Salud). 2015. "Risk assessment for Spain of the epidemic of hemorrhagic fever due to the virus Ebola in West Africa (Evaluación del riesgo para España de la epidemia de fiebre hemorrágica por el virus de Ébola en África Occidental)".

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/ebola/documentos/Ebola_final_2015.pdf]. Accessed 19 January 2021

1.3.2 Biosecurity training and practices

1.3.2a

Does the country require biosecurity training, using a standardized, required approach, such as through a common curriculum or a trainthe-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential?

Yes = 1 , No = 0

Current Year Score: 0

In Spain there is no publicly available evidence of a requirement for biosecurity training using a standardized curriculum for personnel working with pathogens, toxins or biological materials with pandemic potential. Order PCI/168/2019 on the National Biosecurity Plan (Plan Nacional de Biocustodia) there is no evidence of biosecurity training requirements.[1] Access to the Confidence Building Measures that Spain submits on an annual basis is restricted to the public, and it is unknown if they contain information on this matter. [2] Spain's legislation on the issue only addresses worker safety. Article 12 of Decree 664/1997 that establishes protections for workers against risks from exposure to biological agents states simply that "the employer ensures that employees receive adequate training and precise information vis a vis potential health risks, precautions to prevent exposure, hygiene and protective equipment and clothing, and measures that should be taken in case of incidents. The training should be given when an employee starts a job that entails contact with biological agents, adapted as new risks emerge and evolve, and should be repeated as necessary." [3,4] There is no additional information on relevant legislation on biosecurity on the VERTIC database or on the websites of the Ministry of Health, Ministry of Agriculture or Ministry of Defence, the Carlos III Health Institute or the Ministry of Science, Innovation and Universities on the subject. [5,6,7,8,9,10]

[1] Official Bulletin (Boletin Oficial). 23 February 2019. "Order PCI/168/2019, of 22 of February, on the publication of the National Biosecurity Plan, approved by the National Security Commission (Orden PCI/168/2019, de 22 de febrero, por la que se publica el Plan Nacional de Biocustodia, aprobado por el Consejo de Seguridad Nacional)".

[https://www.boe.es/boe/dias/2019/02/23/pdfs/BOE-A-2019-2553.pdf]. Accessed 15 December 2020.

[2] BWC. "Spain". [https://bwc-ecbm.unog.ch/state/spain] Accessed 15 December 2020.

[3] Ministry of Labor and Social Security (Ministerio de Empleo y Seguro Social). May 1997. "Decree 664/1997 on the protection of workers against risks related to the exposure of biological agents in the workplace ("Real decreto sobre la protección de los trabajadores contra los riesgos relacionados con la exposición a agentes biológicos durante el trabajo)".
[http://www.insht.es/InshtWeb/Contenidos/Normativa/GuiasTecnicas/Ficheros/agen_bio.pdf] Accessed 15 December 2020.
[4] Labor Institute for Work, Environment and Health (Instituto Sindical de Trabajo, Ambiente y Salud). "Riesgo biológico" ("Biological risk"). [https://istas.net/salud-laboral/peligros-y-riesgos-laborales/riesgo-biologico] Accessed 15 December 2020.
[5] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social).
[https://www.mscbs.gob.es/en/] Accessed 15 December 2020.

[6] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). [https://www.mapa.gob.es/] Accessed 15 December 2020.

[7] Ministry of Defence (Ministerio de Defensa). [www.dsn.gob.es] Accessed 15 December 2020.

[8] VERTIC. Biological weapons and materials legislation database. [https://www.vertic.org/programmes/biological-weaponsand-materials/bwc-legislation-database/s/]. Accessed 19 January 2021.

[9] Carlos III Health Institute (Instituto de Salud Carlos III) [http://www.isciii.es/] Accessed 15 December 2020.

[10] Ministry of Science, Innovation and Universities (Ministerio de Ciencias, Innovacion y Universidades).

[http://www.ciencia.gob.es/] Accessed 15 December 2020.

1.3.3 Personnel vetting: regulating access to sensitive locations

1.3.3a

Do regulations or licensing conditions specify that security and other personnel with access to especially dangerous pathogens, toxins, or biological materials with pandemic potential are subject to the following checks: drug testing, background checks, and psychological or mental fitness checks?

Personnel are subject to all three of these checks = 3, Personnel are subject to two of these checks = 2, Personnel are subject to one of these checks = 1, Personnel are not subject to any of these checks = 0

Current Year Score: 0

In Spain there is no publicly available evidence of hiring practices in high security laboratories , including information on required background checks, drug testing, or psychological and/or mental health checks. In Order PCI/168/2019 on the National Biosecurity Plan (Plan Nacional de Biocustodia) there is no evidence of personel checks. [1] Access to the Confidence Building Measures reports that Spain submits on an annual basis, is restricted to the public and it is unknown if they contain information on this matter. [2]. The VERTIC database does not have relevant legislation on the subject of personnel vetting and the Ministries of Agriculture, Defence, Health and Science, and the Carlos III Health Institute do not have any additional information on hiring requirements either. [3,4,5,6,7,8]

 Official Bulletin (Boletin Oficial). 23 February 2019. "Order PCI/168/2019, of 22 of February, on the publication of the National Biosecurity Plan, approved by the National Security Commission (Orden PCI/168/2019, de 22 de febrero, por la que se publica el Plan Nacional de Biocustodia, aprobado por el Consejo de Seguridad Nacional)".
 [https://www.boe.es/boe/dias/2019/02/23/pdfs/BOE-A-2019-2553.pdf]. Accessed 15 December 2020.
 [2] BWC. "Spain". [https://bwc-ecbm.unog.ch/state/spain] Accessed 15 December 2020.

[3] VERTIC. Biological weapons and materials legislation database. [https://www.vertic.org/programmes/biological-weapons-



and-materials/bwc-legislation-database/s/]. Accessed 19 January 2021.

[4] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social).

[https://www.mscbs.gob.es/en/] Accessed 15 December 2020.

[5] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). [https://www.mapa.gob.es/] Accessed 15 December 2020.

[6] Ministry of Defence (Ministerio de Defensa). [www.dsn.gob.es] Accessed 15 December 2020.

[7] Institute of Health Carlos III (Instituto de Salud Carlos III) [http://www.isciii.es/] Accessed 15 December 2020.

[8] Ministry of Science, Innovation and Universities (Ministerio de Ciencias, Innovacion y Universidades).

[http://www.ciencia.gob.es/] Accessed 15 December 2020.

1.3.4 Transportation security

1.3.4a

Does the country have publicly available information on national regulations on the safe and secure transport of infectious substances (specifically including Categories A and B)?

Yes = 1 , No = 0

Current Year Score: 1

There is publicly available information on national regulations on the safe and secure transport of infectious substances. [1] Following guidelines from the European Agreement on the International Carriage of Dangerous Goods by Road (ADR), there are several pieces of legislation on the safe and secure transportation of infectious substances (Categories A and B), such as Spanish Law 16/1987 and also Decree 1211/1990, Decree 551/2006 and Decree 1566/1999 [1]. Spain has separate rules for the transportation of contagious biological materials applicable to domestic and international transportation by land and sea. It is the responsibility of the consignor to ensure that contagious biological material is properly classified, packed, marked and that the correct documents are included in the shipment [2]. Law 1566/1999 specifies that the consignor must have a security expert on staff to oversee shipments. [1] Finally, although Spain submits Confidence Building Measures on an annual basis, access to the reports is restricted to the public, and it is unknown if they contain information on this matter. [3]

[1] Ministry of Development. "Land transportation - Dangerous and perishable substances" ("Transportes por carretera - Mercancías peligrosas y perecederas").

[https://web.archive.org/web/20060621064431/http://www.fomento.es:80/MFOM/LANG_CASTELLANO/DIRECCIONES_GEN ERALES/TRANSPORTE_POR_CARRETERA/MMPP/consejero.htm] Accessed 16 December 2020.

[2] Safety Way Biosecurity & Biosafety Solutions. "Are you packing and shipping your clinical samples correctly and safely? ("¿Embala y transporta de manera correcta y segura sus muestras clínicas?"). [http://www.safetyway.es/es/ambitos/gestionriesgos-biologicos-fase-preanalitica/embala-y-transporta-de-manera-correcta-y-segura-sus-muestras-clinicas.html] Accessed 16 December 2020.

[3] BWC. "Spain". [https://bwc-ecbm.unog.ch/state/spain] Accessed 16 December 2020.

1.3.5 Cross-border transfer and end-user screening

1.3.5a

Is there legislation and/or regulations in place to oversee the cross-border transfer and end-user screening of especially dangerous pathogens, toxins, and pathogens with pandemic potential? Yes = 1, No = 0



Current Year Score: 1

Spain has national regulations in place to oversee the cross-border transfer and end-user screening of especially dangerous pathogens, toxins and pathogens with pandemic potential. Spain's Decree 65/2006 regulates the cross-border transfer and end-user screening of all biological samples, including pathological and infectious substances, for scientific use. Participation on a registry of exporters of biological samples is voluntary; non-registered exporters require health/sanitation certificates. Certificates have to be accompanied by a declaration from the recipient who takes responsibility for the sample's correct use and destruction. [1,2] In addition, Spain's Law 22/2011 on dangerous waste also addresses cross border transfers, as laid out in Article 26. It is in line with Regulation (EC) No 1013/2006 of the European Parliament on shipments of waste, Regulation (EC) No 1418/2007 on determined substances and Regulation (EC) No 1013/2006 on those countries outside the OECD on the control of cross border movements of substances. According to this law, dangerous wastes (listed in Annex III) include toxic and infectious substances as well as explosives, irritants, carcinogens, mutagenic substances, among others. The recipient has to be listed on the export documentation. [3] Although Spain submits Confidence Building Measures on an annual basis, access to the reports is restricted to the public, and it is unknown if they contain information on this matter. [4] Further, End-user screening is mandated by the EU's Regulation No 428/2009 Setting up a Community Regime for the Control of Exports, Transfer, Brokering and Transit of Dual-Use Items. Regulations issued by the European Council are legally binding legislative acts in all EU member states, including Spain. [5]

[1] Official Bulletin (Boletin Oficial). 30 January 2006. "Decree 65/2006 which establishes the requirements for the import and export of biological samples" ("Decreto 65/2006, de 30 de enero, por el que se establecen requisitos para la importación y exportación de muestras biológicas"). [https://www.boe.es/buscar/doc.php?id=BOE-A-2006-1916] Accessed 16 December 2020.

[2] Spanish Government. Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). "Import and export of biological samples (Importación y exportación de muestras biológicas)".

[https://www.mscbs.gob.es/profesionales/saludPublica/sanidadExterior/muestras_Biologicas.htm.] Accessed 16 December 2020.

[3] Official Bulletin (Boletin Oficial). 28 July 2011. "Law 22/2011 on contaminated soil and waste" ("Ley 22/2011, de 28 de julio, de residuos y suelos contaminados") [https://www.boe.es/boe/dias/2011/07/29/pdfs/BOE-A-2011-13046.pdf] Accessed 16 December 2020.

[4] BWC. "Spain". [https://bwc-ecbm.unog.ch/state/spain] Accessed 16 December 2020.

[5] European Council. Council Regulation (EC) No 428/2009 of 5 May 2009. "Setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items." [https://eur-lex.europa.eu/legal-

content/EN/TXT/?uri=CELEX:02009R0428-20191231]. Accessed 5 August 2020.

1.4 BIOSAFETY

1.4.1 Whole-of-government biosafety systems

1.4.1a

Does the country have in place national biosafety legislation and/or regulations?

Yes = 1 , No = 0

Current Year Score: 1

Spain has in place national biosafety regulations. Degree 664/97 on biosafety highlights the protection of workers against risks to their health and safety arising from exposure to biological agents at work, as well as prevention of such risks by establishing minimum requirements applicable to activities in which workers are or may be exposed to biological agents. The

Decree also governs a manual on biosafety for laboratories, with protocols broken down by four levels of biosafety with the highest classification designated for dangerous pathogens [1,2] Although Spain submits Confidence Building Measures on an annual basis, access to the reports is restricted to the public, and it is unknown if they contain information on this matter. [3]

[1] National Network of Epidemiological Surveillance (Red Nacional de Vigilancia Epidemiológica). "Epidemiological surveillance results - communicable diseases, annual report 2016" ("Resultados de la vigilancia epidemiologica - enfermedades transmisibles, informe anual. 2016").

[http://gesdoc.isciii.es/gesdoccontroller?action=download&id=25/01/2019-d8ee271b6f] Accessed 16 December 2020.
[2] Safetyway. "Royal Decree 664/97 Worker Protection Against Biological Hazards". [http://www.safetyway.es/en/spanish-regulations/r-d-664-97-worker-protection-against-biological-hazards.html]. Accessed 16 December 2020.
[3] BWC. "Spain". [https://bwc-ecbm.unog.ch/state/spain] Accessed 16 December 2020.

1.4.1b

Is there an established agency responsible for the enforcement of biosafety legislation and regulations? Yes = 1 , No = 0

Current Year Score: 1

In Spain there is evidence that an established agency is responsible for the enforcement of biosafety legislation and regulations. Spain's Decree 664/1997 on the protection of workers exposed to biological agents in the workplace is governed by the Ministry of Work, Migration and Social Security. Decree 664/1997 on biosafety addresses the protection of workers exposed to biological agents and details measures on physical containment and operation practices of facilities where pathogens and toxins are stored or processed. This is in line with EU Directive 2000/54/CE on protection of workers from risks related to exposure to biological agents at work. [2] The Decree also governs a manual on biosafety for laboratories, with protocols broken down by four levels of biosafety with the highest classification designated for dangerous pathogens. [1,3]

[1] Official Bulletin (Boletin Oficial). "Decree 664/1997 on the protection of workers against risks related to exposure to biological agents at work (Real Decreto 664/1997, de 12 de mayo, sobre la protección de los trabajadores contra los riesgos relacionados con la exposición a agentes biológicos durante el trabajo)". [https://www.boe.es/buscar/pdf/1997/BOE-A-1997-11144-consolidado.pdf]. Accessed 16 December 2020.

[2] EU Parliament. 2000. "Directive 2000/54/EC of the European Parliament and of the Council of 18 September 2000 on the protection of workers from risks related to exposure to biological agents at work". [https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32000L0054]. Accessed 16 December 2020

[3] Ministry of Work, Migration and Social Security (Ministerio de Empleo, Migracion y Seguridad Social). [http://www.mitramiss.gob.es] Accessed 16 December 2020.

1.4.2 Biosafety training and practices

1.4.2a

Does the country require biosafety training, using a standardized, required approach, such as through a common curriculum or a trainthe-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential?

Yes = 1 , No = 0

Current Year Score: 0

Is Spain there is no evidence of a standardized biosafety training for workers against risks from exposure to biological agents. Decree 664/1997 "on the protection of workers against risks related to the exposure of biological agents in the workplace" does not address required standardized training for workers against risks from exposure to biological agents. [1] Guidelines on "Biological Risk" and the "Technical Guide for the evaluation and prevention of risks related to exposure to biological agents, agent" establish that training should be given when an employee starts a job that entails contact with biological agents, adapted as new risks emerge and evolve, be repeated as necessary, however there are no standardized training stipulations. [1,2,3] On the websites of the Ministry of Health, Agriculture, Science or the Carlos III Health Institute, there is no additional information on required training, standardized or not [4,5,6,7]. There is no additional information on legislation addressing biosafety training on the VERTIC database [8]. Finally, although Spain submits Confidence Building Measures on an annual basis, access to the reports is restricted to the public, and it is unknown if they contain information on this matter. [9]

 Ministry of Work, Migration and Social Security (Ministerio de Trabajo, Migraciones y Seguridad Social). May 1997.
 "Decree 664/1997 on the protection of workers against risks related to the exposure of biological agents in the workplace" ("Real decreto sobre la protección de los trabajadores contra los riesgos relacionados con la exposición a agentes biológicos durante el trabajo"). [http://www.insht.es/InshtWeb/Contenidos/Normativa/GuiasTecnicas/Ficheros/agen_bio.pdf] Accessed 17 December 2020.

[2] Labor Institute for Work, Environment and Health (Instituto Sindical de Trabajo, Ambiente y Salud). "Riesgo biológico (Biological risk)". [https://istas.net/salud-laboral/peligros-y-riesgos-laborales/riesgo-biologico]. Accessed 17 December 2020.
[3] National Institute of Safety and Health at Work (Instituto Nacional de Seguridad e Higiene en el Trabajo). Updated August 2013. "Technical Guide for the evaluation and prevention of risks related to exposure to biological agents" ("Guia tecnica para la evaluación y prevención de los riesgos relacionados con la exposición a agentes biológicos ").

[http://www.insht.es/InshtWeb/Contenidos/Normativa/GuiasTecnicas/Ficheros/agen_bio.pdf] Accessed 17 December 2020.[4] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social).

[https://www.mscbs.gob.es/en/] Accessed 17 December 2020.

[5] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). [https://www.mapa.gob.es/] Accessed 17 December 2020.

[6] Institute of Health Carlos III (Instituto de Salud Carlos III) [http://www.isciii.es/] Accessed 17 December 2020.

[7] Ministry of Science, Innovation and Universities (Ministerio de Ciencias, Innovacion y Universidades).

[http://www.ciencia.gob.es/] Accessed 17 December 2020.

[8] VERTIC. Biological weapons and materials legislation database. [https://www.vertic.org/programmes/biological-weaponsand-materials/bwc-legislation-database/s/]. Accessed 19 January 2021.

[9] BWC. "Spain". [https://bwc-ecbm.unog.ch/state/spain] Accessed 17 December 2020.

1.5 DUAL-USE RESEARCH AND CULTURE OF RESPONSIBLE SCIENCE

1.5.1 Oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research

1.5.1a

Is there publicly available evidence that the country has conducted an assessment to determine whether ongoing research is occurring on especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research? Yes = 1, No = 0

Current Year Score: 0

In Spain there is no publicly available evidence that assessments are being conducted to determine whether ongoing research is occurring on especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research.

On the websites of the Ministry of Health, Ministry of Defence, Ministry of Agriculture, Ministry of Science or the Carlos III Health Institute ther is no evidence of assessments to determine whether ongoing research is occurring on especially dangerous pathogens. [1,2,3,4,5] Although Spain submits Confidence Building Measures on an annual basis, access to the reports is restricted to the public, and it is unknown if they contain information on this matter. [6] On the VERTIC database there is also no additional infomation [7].

[1] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social).

[https://www.mscbs.gob.es/en/] Accessed 17 December 2020.

[2] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). [https://www.mapa.gob.es/] Accessed 17 December 2020.

[3] Ministry of Defence (Ministerio de Defensa). [www.dsn.gob.es] Accessed 17 December 2020.

[4] Carlos III Health Institute (Instituto de Salud Carlos III) [http://www.isciii.es/] Accessed 17 December 2020.

[5] Ministry of Science, Innovation and Universities (Ministerio de Ciencias, Innovacion y Universidades).

[http://www.ciencia.gob.es/] Accessed 17 December 2020.

[6] BWC. "Spain". [https://bwc-ecbm.unog.ch/state/spain] Accessed 17 December 2020.

[7] VERTIC Biological weapons and materials legislation database.[https://www.vertic.org/programmes/biological-weaponsand-materials/bwc-legislation-database/s/] Accessed 16 January 2021

1.5.1b

Is there legislation and/or regulation requiring oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research?

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Spain has legislation and/or regulation requiring oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research. National decrees only address the disclosure of dual use materials for cross-border commerce, however there is no evidence of oversight of research on dual use biological agents. [1,2,3] On the websites of the Ministry of Health, Ministry of Defence, Ministry of Agriculture, Ministry of Science or the Carlos III Health Institute there is no such evidence [4,5,6,7,8]. Athough Spain submits Confidence Building Measures on an annual basis, access to the reports is restricted to the public, and it is unknown if they contain information on this matter. [9] On the VERTIC database there is also no evidence of such legislation [10]

[1] Official Bulletin (Boletin Oficial). 30 January 2006. "Decree 65/2006 which establishes the requirements for the import and export of biological samples" ("Decreto 65/2006, de 30 de enero, por el que se establecen requisitos para la importación y exportación de muestras biológicas"). [https://www.boe.es/buscar/doc.php?id=BOE-A-2006-1916] Accessed 16 December 2020.

[2] Spanish Government. Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). "Import and export of biological samples (Importación y exportación de muestras biológicas)".

[https://www.mscbs.gob.es/profesionales/saludPublica/sanidadExterior/muestras_Biologicas.htm.] Accessed 16 December 2020.

[3] Official Bulletin (Boletin Oficial). 28 July 2011. "Law 22/2011 on contaminated soil and waste" ("Ley 22/2011, de 28 de julio, de residuos y suelos contaminados") [https://www.boe.es/boe/dias/2011/07/29/pdfs/BOE-A-2011-13046.pdf] Accessed 16 December 2020.

[4] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). [https://www.mscbs.gob.es/en/] Accessed 17 December 2020.



[5] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). [https://www.mapa.gob.es/] Accessed 17 December 2020.

[6] Ministry of Defence (Ministerio de Defensa). [www.dsn.gob.es] Accessed 17 December 2020.

[7] Carlos III Health Institute (Instituto de Salud Carlos III) [http://www.isciii.es/] Accessed 17 December 2020.

[8] Ministry of Science, Innovation and Universities (Ministerio de Ciencias, Innovacion y Universidades).

[http://www.ciencia.gob.es/] Accessed 17 December 2020.

[9] BWC. "Spain". [https://bwc-ecbm.unog.ch/state/spain]Accessed 17 December 2020.

[10] VERTIC Biological weapons and materials legislation database.[https://www.vertic.org/programmes/biological-weaponsand-materials/bwc-legislation-database/s/] Accessed 19 January 2021.

1.5.1c

Is there an agency responsible for oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research?

Yes = 1 , No = 0

Current Year Score: 0

In Spain there is no publicly available evidence of an agency responsible for the oversight of research with especially dangerous pathogens, pathogens with pandemic potential and/or other dual use research. On the Control of Foreign Trade in Materials of Defence and Dual Use Products and Technologies (Decree 679/2014), any entity that handles dual use materials is required to apply for a license from the Ministry of Commerce but there is no mention of any additional oversight requirements. [1] The Ministries of Health, Agriculture, Defence and Science and the Network of Laboratories of Biological Alert (RELAB) and the Carlos III Health Institute (which is home to the reference laboratory network) do not have any information about overseeing this type of research. [2][3][4][5][6] Although Spain submits Confidence Building Measures on an annual basis, access to the reports is restricted to the public, and it is unknown if they contain information on this matter.[7] On the VERTIC database there is also no evidence of an agency responsible for the oversight of this type of research [8].

[1] Official Bulletin (Boletín Oficial). 26 August 2014. "Decree 679/2014 which approves the regulations of control of foreign trade in defense materials and dual use products and technologies (Real Decreto 679/2014, de 1 de agosto, por el que se aprueba el Reglamento de control del comercio exterior de material de defensa, de otro material y de productos y tecnologías de doble uso)". [https://www.boe.es/boe/dias/2014/08/26/pdfs/BOE-A-2014-8926.pdf] Accessed 17 December 2020.

[2] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social).

[https://www.mscbs.gob.es/en/] Accessed 17 December 2020.

[3] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). [https://www.mapa.gob.es/] Accessed 17 December 2020.

[4] Ministry of Defence (Ministerio de Defensa). [www.dsn.gob.es] Accessed 17 December 2020.

[5] Carlos III Health Institute (Instituto de Salud Carlos III) [http://www.isciii.es/] Accessed 17 December 2020.

[6] Ministry of Science, Innovation and Universities (Ministerio de Ciencias, Innovacion y Universidades).

[http://www.ciencia.gob.es/] Accessed 17 December 2020.

[7] BWC. "Spain". [https://bwc-ecbm.unog.ch/state/spain] Accessed 17 December 2020.

[8] VERTIC Biological weapons and materials legislation database.[https://www.vertic.org/programmes/biological-weaponsand-materials/bwc-legislation-database/s/] Accessed 19 January 2021.



1.5.2 Screening guidance for providers of genetic material

1.5.2a

Is there legislation and/or regulation requiring the screening of synthesized DNA (deoxyribonucleic acid) against lists of known pathogens and toxins before it is sold?

Yes = 1 , No = 0

Current Year Score: 0

In Spain, there is no publicly evidence of national legislation, regulation or policy addressing the screening of synthesized DNA before it is sold. No evidence was found on the websites of the Ministries of Health, Agriculture, Science and Defence and the Carlos III Health Institute [1,2,3,4,5,6]. Although Spain submits Confidence Building Measures on an annual basis, access to the reports is restricted to the public, and it is unknown if they contain information on this matter. [7] On the VERTIC database there is also no evidence of this type of legislation. [8]

[1] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social).

[https://www.mscbs.gob.es/en/] Accessed 17 December 2020.

[2] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). [https://www.mapa.gob.es/] Accessed 17 December 2020.

[3] Ministry of Defence (Ministerio de Defensa). [www.dsn.gob.es] Accessed 17 December 2020.

[4] Ministry of Science, Innovation and Universities (Ministerio de Ciencia, Innovacion y Universidades).

[http://www.ciencia.gob.es/] Accessed 17 December 2020.

[5] Institute of Health Carlos III (Instituto de Salud Carlos III) [http://www.isciii.es/] Accessed 17 December 2020.

[6] Ministry of Science, Innovation and Universities (Ministerio de Ciencias, Innovacion y Universidades).

[http://www.ciencia.gob.es/] Accessed 17 December 2020.

[7] BWC. "Spain". [https://bwc-ecbm.unog.ch/state/spain] Accessed 17 December 2020.

[8] VERTIC Biological weapons and materials legislation database.[https://www.vertic.org/programmes/biological-weaponsand-materials/bwc-legislation-database/s/] Accessed 19 January 2021

1.6 IMMUNIZATION

1.6.1 Vaccination rates

1.6.1a

Immunization rate (measles/MCV2) Immunization rate (measles/MCV2), 95% or greater = 2, 80-94.9% = 1, Less than 80%, or no data = 0 Current Year Score: 1

2019

World Health Organization

1.6.1b

Are official foot-and-mouth disease (FMD) vaccination figures for livestock publicly available through the OIE database? Yes = 1, No = 0



Current Year Score: 1

2020

OIE WAHIS database

Category 2: Early detection and reporting for epidemics of potential international concern

2.1 LABORATORY SYSTEMS STRENGTH AND QUALITY

2.1.1 Laboratory testing for detection of priority diseases

2.1.1a

Does the national laboratory system have the capacity to conduct diagnostic tests for at least 5 of the 10 WHO-defined core tests?

Evidence they can conduct 5 of the 10 core tests and these tests are named = 2, Evidence they can conduct 5 of the 10 core tests and the tests are not named = 1, No evidence they can conduct 5 of the 10 core tests = 0

Current Year Score: 2

There is evidence that Spain's national laboratory system is capable of conducting 6 core diagnostic tests, however there is no evidence that Spain has defined the four country-specific tests. Spain's National Microbiology Centre (Centro Nacional de Microbiologia), part of the Carlos III Health Institute, is the reference laboratory in Spain. The Ministry of Science's Resolution of April 3rd 2019 established the prices charged by the Institute for a range of 362 laboratorial tests, including polymerase chain reaction testing for Influenza flu virus; Poliovirus culture (Ac neutralization); Serology for HIV; Microscopy for tuberculosis; Rapid diagnostic testing for plasmodium (malaria); and bacterial culture for Salmonella. [1] There is further evidence of the Institute's capabilities for PCR testing for influenza, microscopy for mycobacterium tuberculosis, rapid diagnostic testing (immunoquick contact) for plasmodium spp and serology (ELISA and Western Blot) for HIV/AIDS [2,3,4,5]. Regarding poliovirus, poliovirus surveillance is done through the surveillance of poliomyelitis. [6] Spain's Acute Flaccid Paralysis (AFP) Surveillance Laboratory Network, coordinated by the National Poliovirus Laboratory (NPL) at the Carlos III Health Institute, has the capacity to conduct virus culture for poliovirus - following protocols recommended by the World Health Organisation (WHO). Laboratory analysis consists of the evaluation of viral growth after two blind passages on cell lines (RD and L20B) sensitive to poliovirus infection (3 serotypes) and to most of the non-polio EV (NPEV) infections. The NPL is responsible for confirming EV detection and characterising the serotype. [6,7] Finally, there is additionally bacterial culture diagnostic testing capability for salmonella enteritidis serotype typhi, at the Institute and elsewhere, according to an articles from the Microbiology Laboratory from Hospital La Plana and an article that cites interview with a member of the Board of the Spanish Society for Infectious Diseases and Clinical Microbiology (Sociedad Espanola de Enfermedades Infecciosas y Microbiologia Clinica). [8,9] Although Spain's national laboratory system is capable of conducting the 6 core diagnostic tests, there is no evidence that Spain has defined the four country-specific tests in the website of the Ministry of Health or the National Network of Epidemiological Surveillance. [10,11]

[1] Official Bulletin (Boletín Oficial). 2019. "Resolution of April 3, 2019, of the Carlos III Health Institute, which establishes the public prices corresponding to the provision of services and activities (Resolución de 3 de abril de 2019, del Instituto de Salud Carlos III, por la que se establecen los precios públicos correspondientes a la prestación de servicios y actividades del organismo)". [https://www.boe.es/eli/es/res/2019/04/03/%287%29]. Accessed 26 November 2020

[2] National Center of Microbiology (Centro Nacional de Microbiologia). "Diagnostic Competency" ("Area de Orientacion Diagnostica").

[https://www.isciii.es/QueHacemos/Servicios/DiagnosticoMicrobiol%C3%B3gicoyProgramasVigilancia/Paginas/default.aspx]. Accessed 26 November 2020

[3] National Network of Epidemiological Surveillance (Red Nacional de Vigilancia Epidemiológica). "Epidemiological surveillance results - communicable diseases, Annual Report 2017-18" ("Resultados de la vigilancia epidemiologica - enfermedades transmisibles, Informe Anual 2017-18").

[https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/EnfermedadesTransmisibles/Documents/INFOR MES/INFORMES%20RENAVE/RENAVE_Informe_anual_2017-2018.pdf]. Accessed 26 November 2020

[4] National Accreditation Entity (Entidad Nacional de Acreditación). 9 March 2018. "Accreditation No. 175 - National Microbiology Center (Acreditacion No. 175 - Centro Nacional de Microbiologia)".

[https://www.enac.es/documents/7020/d0917025-e4f5-4c4a-a627-1d01b0c170db]. Accessed 26 November 2020 [5] Carlos III Health Institute (Instituto de Salud Carlos III). November 2011. "Anonymous and unrelated study on the prevalence of anti-HIV antibodies in newborns in six autonomous communities 2003-2010" ("Estudio anonimo y no relacionado sobre la prevalencia de anticuerpos VIH en recien nacidos de 6 comunidades autonomas 2003 - 2010"). [https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/sida/vigilancia/InformeRNVIH2003_2010.pdf]. Accessed 26 November 2020

[6] Carlos III Health Institute. February 2016. "Spain's plan of action for the eradication of poliomyelitis" (Plan de acción de España para la erradicación de poliomielitis)".

[https://www.mscbs.gob.es/profesionales/saludPublica/prevPromocion/vacunaciones/polio/docs/Plan_erradicacion_poliomi elitis.pdf]. Accessed 26 November 2020

[7] Eurosurveillance. 22 November 2018. Volume 23, Issue 47. "Acute flaccid paralysis (AFP) surveillance: challenges and opportunities from 18 years' experience, Spain, 1998 to 2015". [https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2018.23.47.1700423]. Accessed 26 November 2020

[8] Carlos III Health Institute (Instituto de Salud Carlos III). 9 March 2007. "Isolation of Salmonella enterica serovar Typhi in mesenteric adenopathy (Aislamiento de Salmonella enterica serovar Typhi en una adenopatía mesentérica").

[http://www.seq.es/seq/0214-3429/26/2/gil.pdf]. Accessed 26 November 2020

[9] Care for yourself (Cuidateplus). 4 February 2019. "Typhoid fever" ("Fiebre tifoida").

[https://cuidateplus.marca.com/enfermedades/viajero/fiebre-tifoidea.html]. Accessed 26 November 2020

[10] Ministry of Health (Ministerio de Salud). [https://www.mscbs.gob.es/home.htm]. Accessed 14 December 2020

[11] National Network of Epidemiological Surveillance (Red Nacional de Vigilancia Epidemiológica, RENAVE).

[https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/Paginas/default.aspx]. Accessed 14 December 2020

[12] Coordination Centre for Health Alerts and Emergencies (Centro de Coordination de Alertas y Emergencias Sanitarias). "Prepardness and Response Activities (Actividades de Preparación y respuesta)".

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/activPrepRes.htm]. Accessed 14 December 2020

2.1.1b

Is there a national plan, strategy or similar document for conducting testing during a public health emergency, which includes considerations for testing for novel pathogens, scaling capacity, and defining goals for testing?

Yes, there is evidence of a plan, and it includes considerations for testing for novel pathogens, scaling capacity, and defining goals for testing = 2, Yes, there is evidence of a plan, but there is insufficient evidence that it includes considerations for testing for novel pathogens, scaling capacity, and defining goals for testing = 1, No evidence of a plan = 0

Current Year Score: 1

Spain has plans for conducting testing during a public health emergency, but there is insufficient evidence that it includes considerations for testing for novel pathogens, scaling capacity, and defining goals for testing. Although there is no evidence of an overarching national public health emergency plan to respond to public health emergencies, Spain has standalone emergency and response plans for communicable diseases such as a Covid-19, flu pandemic, HIV, Hepatitis C, SARS, and vector-borne diseases including chikungunya, dengue and Zika. [1,2,3,4] Most of these disease-specific plans include provisions to conduct tests at regional and national-level. Some of these documents have additional references to extend testing capacity as needed, such as outlined in the "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)". [4] However the disease-specific plans do not include consideration for testing for novel pathogens, and they do not define goals for testing. There is also a lack of evidence for such provisions in the Ministry of Health, in the National Network on Epidemiological Surveillance, or in the Coordination Centre for Health Alerts and Emergencies (CCAES) websites. [5,6,7]

[1] Ministry of Health (Ministerio de Salud). "Communicable Diseases (Enfermedades Transmisibles)".

[https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/home.htm]. Accessed 14 December 2020 [2] Ministry of Health (Ministerio de Salud). "Preparadeness and Response Activities (Actividades de Preparación y Respuesta)". [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/actPre.htm]. Accessed 14 December 2020

[3] Ministry of Health (Ministerio de Salud). 2005. "National Influenza Pandemic Preparedness and Response Plan (Plan nacional de preparación y respuesta ante una pandemia de gripe)".

[https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/docs/PlanGripeEspanol.pdf]. Accessed 14 December 2020

[4] Ministry of Health (Ministerio de Salud). 2020. "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)".

[https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/13.07130720131534059.pdf]. Accessed 14 December 2020 [5] Ministry of Health (Ministerio de Salud). [https://www.mscbs.gob.es/home.htm]. Accessed 14 December 2020

[6] National Network of Epidemiological Surveillance (Red Nacional de Vigilancia Epidemiológica, RENAVE).

[https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/Paginas/default.aspx]. Accessed 14 December 2020

[7] Coordination Centre for Health Alerts and Emergencies (Centro de Coordination de Alertas y Emergencias Sanitarias). "Prepardness and Response Activities (Actividades de Preparación y respuesta)".

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/activPrepRes.htm]. Accessed 14 December 2020

2.1.2 Laboratory quality systems

2.1.2a

Is there a national laboratory that serves as a reference facility which is accredited (e.g., International Organization for Standardization [ISO] 15189:2003, U.S. Clinical Laboratory Improvement Amendments [CLIA])?

Yes = 1 , No = 0

Current Year Score: 1

The national laboratory that serves as a reference facility in Spain is accredited. Spain's National Center of Microbiology (Centro Nacional de Microbiologia), part of the Saint Carlos III Health Institute is the national reference lab on infectious diseases. [1] The Center is accredited by the National Accrediation Entity (Entidad Nacional de Acreditacion) according to ISO 15189:2013. [2, 3]

 National Center of Microbiology (Centro Nacional de Microbiologia), "National Center of Microbiology - Reference Laboratories" ("Centro Nacional de Microbiologia - Laboratorios de Referencia e Investigación y Unidades de Apoyo").
 [https://www.isciii.es/QuienesSomos/CentrosPropios/CNM/Paginas/default.aspx]. Accessed 26 November 2020
 National Body on Accreditation (Entidad Nacional de Acreditación), "Accreditation 1032/LE2075 - Instituto de Salud San Carlos III" ("Acreditacion 1032/LE2075 - Instituto de Salud San Carlos III").

[https://www.isciii.es/QueHacemos/Servicios/DiagnosticoGenetico/Documents/ACREDITACION_SDG_IIER_sin_anexo_tecnic o.pdf]. Accessed 26 November 2020

[3] National Body on Accreditation (Entidad Nacional de Acreditación), "Accreditation - Instituto de Salud San Carlos III" ("Acreditacion - Instituto de Salud San Carlos III"). [https://www.enac.es/documents/7020/e74644b7-cfae-4bac-b07d-7888aac63f36?version=1.0]. Accessed 26 November 2020

2.1.2b

Is there a national laboratory that serves as a reference facility which is subject to external quality assurance review? Yes = 1, No = 0

Current Year Score: 1

The national laboratory that serves as a reference facility is subject to external quality assurance review. Spain's National Center of Microbiology (Centro Nacional de Microbiologia), part of the Saint Carlos III Health Institute, is the national reference lab on infectious diseases. [1] The Center is accredited to ISO 15189 by the National Accreditation Entity (Entidad Nacional de Acreditacion, ENAC) and the latest review on microbiological assessment was carried out by ENAC in August 2020. Accredition by ISO 15189 requires external quality assurance reviews. [2,3]

 National Center of Microbiology (Centro Nacional de Microbiologia), "National Center of Microbiology - Reference Laboratories (Centro Nacional de Microbiologia - Laboratorios de Referencia e Investigación y Unidades de Apoyo)".
 [https://www.isciii.es/QuienesSomos/CentrosPropios/CNM/Paginas/default.aspx]. Accessed 26 November 2020
 [2] National Body on Accreditation (Entidad Nacional de Acreditación), "Accreditation 1032/LE2075 - Instituto de Salud San Carlos III (Acreditacion 1032/LE2075 - Instituto de Salud San Carlos III)".

[https://www.isciii.es/QueHacemos/Servicios/DiagnosticoGenetico/Documents/ACREDITACION_SDG_IIER_sin_anexo_tecnic o.pdf]. Accessed 26 November 2020

[3] National Body on Accreditation (Entidad Nacional de Acreditación), "Accreditation - Instituto de Salud San Carlos III (Acreditacion - Instituto de Salud San Carlos III)". [https://www.enac.es/documents/7020/e74644b7-cfae-4bac-b07d-7888aac63f36?version=1.0]. Accessed 26 November 2020

2.2 LABORATORY SUPPLY CHAINS

2.2.1 Specimen referral and transport system

2.2.1a

Is there a nationwide specimen transport system? Yes = 1 , No = 0



Current Year Score: 0

There is insufficient evidence of a nationwide specimen transport system in Spain. Although the WHO Strategic Partnership for International Health Regulations and Health Security (SPH) country profile publised in 2018 for Spain indicates that the country has a score of 100% on the indicator of a "Specimen transport and referral system question" as part of its self assessment, there is no publicly available evidence of the nationwide specimen transport system. [1] In May 2020 the government published guidelines on the collection and transport of samples for PCR diagnosis of SARS-CoV-2. According to these guidelines, the test samples are to be prepared in a three-layer security packaging, and dispatched through standard or specialized transport companies to the testing laboratories. This suggests the existance of a nationwide system, but instead the reliance on multiple providers across the country. [2] Similarly, the "Strategy for Early Detection, Surveillance and Covid-19 Control (Estrategia de Deteccion Precoz, Vigilancia y Control de Covid-19)" published in December 2020, also highlights the need for testing stations across the country to use appropriate transport providers to ship samples to the laboratories. [3] In addition, there is evidence that there is a sub-national system, such as in the Madrid Community, but insufficient evidence that this covers the whole country. [4] There is no evidence of nationwide specimen transport system in the Ministry of Health or in the National Network on Epidemiological Surveillance websites. [5,6]

[1] World Health Organisation. "2018 Spain | Strategic Partnership For IHR And Health Security (SPH)."

[https://extranet.who.int/sph/2018-spain]. Accessed 21 December 2020

[2] Ministry of Health (Ministro de Sanidad). 2020. "Collection and transport of samples for PCR diagnosis of SARS-CoV-2 (Toma y transporte de muestras para diagnóstico por PCR de SARS-CoV-2)".

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov/documentos/202005018_Toma_muestra s.pdf]. Accessed 21 December 2020

[3] Ministry of Health (Ministro de Sanidad). 2020. "Strategy for Early Detection, Surveillance and Covid-19 Control (Estrategia de Deteccion Precoz, Vigilancia y Control de Covid-19)".

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov/documentos/COVID19_Estrategia_vigilan cia_y_control_e_indicadores.pdf]. Accessed 21 December 2020

[4] Servicio Madrileño de Salud. "NORMAS PARA EL TRANSPORTE DE MUESTRAS COMUNIDAD DE MADRID".

[http://www.madrid.org/cs/Satellite?blobcol=urldata&blobheader=application%2Fpdf&blobheadername1=Content-

disposition & blobheadername 2= cadena & blobheader value 1= filename % 3D051. -

+NORMAS+PARA+EL+TRANSPORTE+DE+MUESTRAS+-

+CONTENEDORES.pdf&blobheadervalue2=language%3Des%26site%3DPortalSalud&blobkey=id&blobtable=MungoBlobs&blo bwhere=1220503144472&ssbinary=true]. Accessed 21 December 2020

[5] Ministry of Health (Ministerio de Salud). [https://www.mscbs.gob.es/home.htm]. Accessed 14 January 2021

[6] National Network of Epidemiological Surveillance (Red Nacional de Vigilancia Epidemiológica, RENAVE).

[https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/Paginas/default.aspx]. Accessed 14 January 2021

2.2.2 Laboratory cooperation and coordination

2.2.2a

Is there a plan in place to rapidly authorize or license laboratories to supplement the capacity of the national public health laboratory system to scale-up testing during an outbreak?

Yes = 2 , Yes, but there is evidence of gaps in implementation = 1 , No = 0

Current Year Score: 2

Spain has a plan in place to rapidly authorize or license laboratories to supplement the capacity of the national public health laboratory system to scale-up testing during an outbreak. Health Institute Carlos III (Instituto de Salud Carlos III) is the governmental agency responsible for scientific and technical accreditation of health entities in Spain, as mandated by Decree 375/2001. [1] The Institute is also responsible for coordination of the Biological Alert Laboratories (Re-Lab), the national laboratory network for detection and identification of biological agents in the areas of human health, environmental health and animal health. Order PCI/1381/2018, regulating Re-Lab outlines the need for a quick response in health emergencies, including the need to expand the laboratory network in crisis situations. [2]. In April 2020, at the start of the COVID-19 outbreak, the Institute Carlos III fast tracked the accreditation of 11 new laboratories to increase testing capacity in Spain. [3]

[1] Official Bulletin (Boletín Oficial). 2001. "Royal Decree 375/2001, of April 6, approving the Statute of the "Carlos III Health Institute (Real Decreto 375/2001, de 6 de abril, por el que se aprueba el Estatuto del Instituto de Salud Carlos III)". [https://www.boe.es/buscar/act.php?id=BOE-A-2001-8157]. Accessed 21 December 2020

[2] Official Bulletin (Boletín Oficial). 2018. "Order PCI / 1381/2018, of December 18, which regulates the Network of Biological Alert Laboratories «Re-Lab» (Orden PCI/1381/2018, de 18 de diciembre, por la que se regula la Red de Laboratorios de Alerta Biológica Re-Lab)". [https://www.boe.es/boe/dias/2018/12/26/pdfs/BOE-A-2018-17707.pdf]. Accessed 21 December 2020

[3] Spanish Government. 2020. "The ISCIII validates 11 new laboratories of research centers and universities to perform PCR tests (El ISCIII valida 11 nuevos laboratorios de centros de investigación y universidades para hacer test PCR)".
 [https://www.lamoncloa.gob.es/serviciosdeprensa/notasprensa/ciencia-e-innovacion/Paginas/2020/240420-test.aspx].
 Accessed 21 December 2020

2.3 REAL-TIME SURVEILLANCE AND REPORTING

2.3.1 Indicator and event-based surveillance and reporting systems

2.3.1a

Is there evidence that the country is conducting ongoing event-based surveillance and analysis for infectious disease? Yes, there is evidence of ongoing event-based surveillance and evidence that the data is being analyzed on a daily basis = 2, Yes, there is evidence of ongoing event-based surveillance, but no evidence that the data are being analyzed on a daily basis = 1, No = 0

Current Year Score: 2

Spain conducts ongoing event-based surveillance and analysis for infectious diseases on a daily basis. The Centre for Coordination of Health Alerts and Emergencies (Centro de Coordinación de Alertas y Emergencias Sanitarias, CCAES) is responsible for management of information and response for potential public health emergency events. [1] The CCAES manages real-time information on disease reporting through the National System of Early Warning and Rapid Response (Sistema Nacional de Alerta Precoz y Respuesta Rápida, SIAPR) which monitors official sources, as well as media and internet sources to identify public health threats. [2] The CCAES meets daily to discuss findings, and issues daily, monthly and annual reports on the analysis. [3, 4]

[1] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). "Center for Coordination of Health Alerts and Emergencies: Mission and Functions (Centro de Coordinación de Alertas y Emergencias Sanitarias: Mision y Funciones)". [http://www.mscbs.gob.es/profesionales/saludPublica/ccayes/queEsCCAES/misifunci.htm]. Accessed 26 November 2020

[2] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). "National System of Early Warning and Rapid Response (Sistema Nacional de Alerta Precoz y Respuesta Rápida)".

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/SIARP/home.htm]. Accessed 26 November 2020 [3] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). "Epidemiological Intelligence Activities of the CCAES (Actividades de Inteligencia Epidemiologica en el CCAES)".

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/inteligenciaepidemiologica/actIntEpi.htm]. Accessed 26 November 2020

[4] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). 2012. "Epidemiological Intelligence Activities (Actividades de Inteligencia Epidemiologica)".

[http://www.mscbs.gob.es/profesionales/saludPublica/ccayes/inteligenciaepidemiologica/doc/ieCcaes2012.pdf]. Accessed 26 November 2020

2.3.1b

Is there publicly available evidence that the country reported a potential public health emergency of international concern (PHEIC) to the WHO within the last two years?

Yes = 1 , No = 0

Current Year Score: 1

Spain has reported a potential public health emergency of international concern to the World Health Organisation (WHO) within the last two years. In September 2019, Spain notified the WHO an outbreak of listeriosis with 222 confirmed cases linked to the consumption of chilled roasted pork meat in the region of Anadalusia in the South of Spain. [1,2] There is no evidence that Spain reported Covid-19 as a PHEIC to the WHO.

 World Health Organization (WHO). "Disease outbreak news: Spain."Press Release - Listeriosis Outbreak (Notas de Prensa -Brote de listeriosis". [http://www.who.int/csr/don/archive/country/esp/en/]. Accessed 26 November 2020
 Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). "Press Release -Listeriosis outbreak detected in Andalusia (Notas de Prensa - Brote de listeriosis detectado en Andalucía". [https://www.mscbs.gob.es/gabinete/notasPrensa.do?id=4641]. Accessed 26 November 2020

2.3.2 Interoperable, interconnected, electronic real-time reporting systems

2.3.2a

Does the government operate an electronic reporting surveillance system at both the national and the sub-national level? Yes = 1, No = 0

Current Year Score: 1

Spain operates an electronic reporting surveillance system at the national level and regional levels. Spain's health surveillance system, the National System of Early Warning and Rapid Response (Sistema Nacional de Alerta Precoz y Respuesta Rápida, SIAPR), is a network of regional centers, coordinated by the National Centre for Coordination of Health Alerts and Emergencies (Centro de Coordinación de Alertas y Emergencias Sanitarias, CCAES), which allows electronic communication of health events and emergencies, and the coordination of response measures at national level. [1, 2, 3] In the case of public health events, the CCAES collects information from the Spanish regions, evaluates the risk for public health, sets-up health response teams and publishes reports, such as the West Nilo Virus outbreak report from cases originated in Southern Spain in October 2020. [4] Information from the regional level feeds into the national system, but each region has different systems depending on local jurisdiction (e.g.: the Region of Murcia or the Madrid Community). [5,6]

[1] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). "National System of Early Warning and Rapid Response (Sistema Nacional de Alerta Precoz y Respuesta Rápida)"

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/SIARP/home.htm]. Accessed 26 November 2020 [2] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). 2013. "The National System of Early Warning and Rapid Response (El Sistema Nacional de Alerta Precoz y Respuesta Rápida)". 21 March 2013. [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/SIARP/Msssi_SIAPR_21032013.pdf]. Accessed 26 November 2020

[3] El Cano Royal Institute (Real Instituto El Cano). "The management of pandemics such as COVID-19 in Spain: Health or safety approach?" (La gestión de pandemias como el COVID-19 en España: ¿enfoque de salud o de seguridad?)". [http://www.realinstitutoelcano.org/wps/wcm/connect/e2501bf2-2f67-47fc-a130-29624e129fa6/ARI42-2020-Arteaga-gestion-de-pandemias-COVID-19-en-Espana-enfoque-de-salud-o-de-seguridad.pdf?MOD=AJPERES&CACHEID=e2501bf2-2f67-47fc-a130-29624e129fa6]. Accessed 26 November 2020

[4] National Centre for Coordination of Health Alerts and Emergencies (Centro de Coordinación de Alertas y Emergencias Sanitarias). 2020 "Rapid Risk Evaluation: West Nile virus meningoencephalitis in Spain (Evaluacion Rapida de Riesgo: Meningoencefalitis por el virus del Nilo occidental en España) ".

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/docs/20201009_ERR_Nilo_Occidental.pdf]. Accessed 26 November 2020

[5] Murcia Regional Public Health Directorate (Direccion General de Salud Public de Murcia). "Early Alter and Rapid Response system of Public Health in the Region of Murcia (Sistema de Alerta Precoz y Respuesta Rapida de Salud Publica en la Region de Murcia)". [https://www.murciasalud.es/recursos/ficheros/317244-siarp.pdf]. Accessed 26 November 2020
[6] Madrid Comunity (Comunidad de Madrid). "Public Health Alerts (Alertas en Salud Publica)".

[https://www.comunidad.madrid/servicios/salud/alertas-salud-publica]. Accessed 26 November 2020

2.3.2b

Does the electronic reporting surveillance system collect ongoing or real-time laboratory data? Yes = 1 , No = 0

Current Year Score: 1

Spain's electronic reporting surveillance system collects real-time laboratory data. According to the document that established the National System of Early Warning and Rapid Response (Sistema Nacional de Alerta Precoz y Respuesta Rápida, SIAPR) in 2013, the system functions "continuously and uninterrupted 24 hours a day." [1] In the SIAPR website, the system is described as "a network of regional liaison centers, coordinated by a National Liaison Center, which allows permanent and rapid communication of risk situations", suggesting data is collected in real-time. [2] There is no additional evidence on the website of the National Alert and Rapid Response System, or on the website of the Ministry of Health, Ministry of Science of Carlos III Health Institute (home to the national reference laboratory system) more broadly, that it collects ongoing/real time laboratory data. [3,4,5]

[1] Ministry of Health (Ministerio de Salud). 21 March 2013. "National System of Early Warning and Rapid Response (Sistema de Alerta Precoz y Respuesta Rapida)".

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/SIARP/Msssi_SIAPR_21032013.pdf] Accessed 26 November 2020

[2] Ministry of Health (Ministerio de Salud). "National System of Early Warning and Rapid Response (Sistema Nacional de Alerta Precoz y Respuesta Rápida, SIAPR)". [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/SIARP/home.htm]. Accessed 26 November 2020

[3] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). [https://www.mscbs.gob.es/]. Accessed 26 November 2020



[4] Carlos III Health Institute (Instituto de Salud Carlos III) [http://www.isciii.es/]. Accessed 26 November 2020
[5] Ministry of Science, Innovation and Universities (Ministerio de Ciencias, Innovacion y Universidades).
[http://www.ciencia.gob.es/]. Accessed 26 November 2020

2.4 SURVEILLANCE DATA ACCESSIBILITY AND TRANSPARENCY

2.4.1 Coverage and use of electronic health records

2.4.1a

Are electronic health records commonly in use?

Electronic health records are commonly in use = 2, Electronic health records are not commonly in use, but there is evidence they are used = 1, No evidence electronic health records are in use = 0

Current Year Score: 2

In Spain, Electronic Health Records are commonly in use. A Ministry of Health report on Health Records, published in October 2020 estimates 93% of the Spanish population have Electronic Health Records within the National Public Health System. [1]

[1] Ministry of Health (Ministerio de Salud). "Electronic Health Record in the National Health System - Status Report 1st
 October 2020 (Historia Clínica Digital del Sistema Nacional de Salud - Informe de Situación 1 de Octubre de 2020)".
 [https://www.mscbs.gob.es/profesionales/hcdsns/contenidoDoc/Inf_sit_HCDSNS_octubre_2020.pdf] Accessed 10 December
 2020

2.4.1b

Does the national public health system have access to electronic health records of individuals in their country? Yes = 1, No = 0

Current Year Score: 1

There is evidence that Spain's national public health system has access to the electronic health records (EHR) of individuals. Article 56 of Law 16/2003 on the Cohesion and Quality of the National Health System and Law 41/2002 which regulates patient information and health records in Spain, mandate the Ministry of Health to coordinate the mechanism of electronic health information across the different regions. [1, 2] In 2006, the Ministry of Health set-up the Health System Electronic Health Records Project to unify EHRs across Spain's different regions [3]. Decree 1093/2010 on the minimum required data for Clinical Reports in the National Health System, outlined nine documents to be available as part of Electronic Health Records, including a Summary of the patient clinical history, admission and discharge reports, etc. [4] Currently, both patients and health personal have access to health records from all regions regardless if the health services have been provided within or outside the patient's region. [5, 6]

[1] Ministry of Health (Ministerio de Salud). 2002. "Law 41/2002 on Basic Regulations on the Autonomy of the Patient and Rights and Obligations Regarding Information and Clinical Documentation (Ley 41/2002, básica reguladora de la autonomía del paciente y de derechos y obligaciones en materia de información y documentación clínica)".

[https://www.mscbs.gob.es/organizacion/sns/planCalidadSNS/pdf/transparencia/ley_autonomia_paciente.pdf]. Accessed 10 December 2020

[2] Ministry of Health (Ministerio de Salud). 2003. "Law 16/2003 on the Cohesion and Quality of the National Health System (Ley 16/2003, cohesión y calidad del Sistema Nacional de Salud)".

 $[https://www.mscbs.gob.es/organizacion/sns/planCalidadSNS/pdf/transparencia/LEY_COHESION_Y_CALIDAD.pdf]. Accessed to the second statement of the sec$



10 December 2020

[3] Ministry of Health (Ministerio de Salud). 2006. "Electronic Health Record System."

[https://www.mscbs.gob.es/organizacion/sns/planCalidadSNS/docs/HCDSNS_English.pdf]. Accessed 10 December 2020 [4] Ministry of Health (Ministerio de Salud). 2010. "Royal Decree 1093/2010 on Minimum Data from Clinical Reports in the National Health System (Real Decreto 1093/2010, Conjunto mínimo de datos de los informes clínicos en el Sistema Nacional de Salud)". [https://www.mscbs.gob.es/organizacion/sns/planCalidadSNS/docs/REAL_DECRETO_1093-2010_CMDIC.pdf]. Accessed 10 December 2020

[5] Ministry of Health (Ministerio de Salud). "Health System Electronic Health Records Project (Proyecto de Historia Clínica Digital en el Sistema Nacional de Salud).

[https://www.mscbs.gob.es/profesionales/hcdsns/contenidoDoc/Antec_e_historial.htm]. Accessed 10 December 2020 [6] Ministry of Health (Ministerio de Salud). "Health System Electronic Health Records Project - Frequent Questions (Proyecto de Historia Clínica Digital en el Sistema Nacional de Salud - Preguntas frecuentes)".

[https://www.mscbs.gob.es/profesionales/hcdsns/Preguntas_frecuentes.htm]. Accessed 10 December 2020

2.4.1c

Are there data standards to ensure data is comparable (e.g., ISO standards)? Yes = 1 , No = 0

Current Year Score: 1

Spain's electronic health records (EHR) have adopted international data standards ensuring data is comparable. Spain's EHR fall under standard ISO/CEN 13606 [1,2,3]. This norm is the European Standard for the communication between EHR systems and a centralized EHR data repository. [4]

[1] Spanish Standard (Normalizacion Espanola). "Health informatics - Electronic health record communication - Part 1: Reference model ISO 13606-1:2019 (Informática sanitaria. Comunicación de la historia clínica electrónica. Parte 1: Modelo de referencia. ISO 13606-1:2019)". [https://www.une.org/encuentra-tu-norma/busca-tu-norma/norma/?c=N0064631]. Accessed 10 December 2020

[2] Ministry of Health (Ministerio de Salud). "Frequently Asked Questions about Clinical Modeling Resources archetypes (Preguntas más frecuentes sobre los Recursos de Modelado Clínico arquetipos)".

[https://www.mscbs.gob.es/profesionales/hcdsns/areaRecursosSem/preg_frec_rec_mod_clin.htm]. Accessed 10 December 2020

[3] Researchgate. Roberto Somolinos et al. "Standardization of EHR via norm CEN/ISO 13606. Studies, developments and applications". ("Estandarización de la Historia Clínica Electrónica a través de la norma CEN/ISO 13606. Estudios, desarrollos y aplicaciones").

[https://www.researchgate.net/publication/268397000_Estandarizacion_de_la_Historia_Clinica_Electronica_a_traves_de_la _norma_CENISO_13606_Estudios_desarrollos_y_aplicaciones]. Accessed 10 December 2020

[4] International Organization for Standardization. "ISO13606-5:2016".[https://www.iso.org/standard/62304.html]. Accessed 10 December 2020

2.4.2 Data integration between human, animal, and environmental health sectors

2.4.2a

Is there evidence of established mechanisms at the relevant ministries responsible for animal, human, and wildlife surveillance to share data (e.g., through mosquito surveillance, brucellosis surveillance)?



Yes = 1 , No = 0

Current Year Score: 1

There is evidence of established mechanisms at the relevant ministries responsible for animal, human and wildlife surveillance to share data. Law 8/2003 on Animal Health mandates the relevant ministries (such as the Ministry of Health, Agriculture or Environment) to share information to enable the prevention and surveillance of zoonotic diseases. [1] Spain's National Network on Epidemiological Surveillance (RENAVE) was created as a mechanism to share surveillance data between the Ministry of Health, Ministry of Agriculture and Agency for Food Safety (under the Ministry of Health) via Decree 1940/2004. [2] In the accompanying protocol on RENAVE's activities, brucellosis surveillance specifies data integration between cases found in humans, animals and food specimens. [3]

[1] Official Bulletin (Boletín Oficial). 2003. "Law 8/2003 on Animal Health (Ley 8/2003 de Sanidad Animal)".
[https://www.boe.es/buscar/act.php?id=BOE-A-2003-8510&tn=1&p=20150721]. Accessed 10 December 2020
[2] Official Bulletin (Boletín Oficial). 2004. "Decree 1940/2004 on the surveillance of zoonoses and zoonotic agents ("Real Decreto 1940/2004, sobre la vigilancia de las zoonosis y los agentes zoonóticos.")
[https://www.boe.es/buscar/doc.php?id=BOE-A-2004-16934]. Accessed 10 December 2020
[3] Ministry of Health. 9 April 2013. "RENAVE Protocols (Protocolos de la Red Nacional de Vigilancia Epidemiologica, RENAVE)".

[https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/EnfermedadesTransmisibles/Documents/PROT OCOLOS/PROTOCOLOS%20EN%20BLOQUE/PROTOCOLOS_RENAVE-ciber.pdf]. Accessed 10 December 2020

2.4.3 Transparency of surveillance data

2.4.3a

Does the country make de-identified health surveillance data on infectious diseases publicly available via reports (or other format) on government websites (such as the Ministry of Health, Ministry of Agriculture, or similar)? Yes = 1, No = 0

Current Year Score: 1

Spain makes de-identified health surveillance data on infectious diseases publicly available via reports on government websites. Spain publishes surveillance data on infectious diseases on a weekly basis, as part of its Weekly Epidemiological Bulletin from the Carlos III Health Institute. As of May 2021, there are publicly available weekly reports for May 2021. The Bulletin includes 23 diseases such as zoonotic diseases (brucelosis), respiratory transmitable diseases (flu, tuberculosis, etc.) or sexually transmitable diseases (sifilis), among others. [1,2]

 [1] Carlos III Health Institute (Instituto de Salud Carlos III). "Weekly Online Bulletin" ("Boletin Semanal en Red").
 [https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/EnfermedadesTransmisibles/Boletines/Paginas/ BoletinSemanalEnRed.aspx]. Accessed 10 December 2020

[2] Carlos III Health Institute (Instituto de Salud Carlos III). "Weekly Surveilance Report nr 50 in 2020 (Informe Semanal de Vigilancia Nº 50 del año 2020)".

[https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/EnfermedadesTransmisibles/Boletines/Docume nts/Boletin_Epidemiologico_en_red/boletines%20en%20red%202020/IS_N%C2%BA50-201209-WEB.pdf]. Accessed 10 December 2020



2.4.3b

Does the country make de-identified COVID-19 surveillance data (including details such as daily case count, mortality rate, etc) available via daily reports (or other formats) on government websites (such as the Ministry of Health, or similar)? Yes = 1, No = 0

Current Year Score: 1

Spain makes de-identified COVID-19 surveillance data publicly available via daily reports on government websites. The National Epidemiology Center publishes daily cases, mortality, 14 day incidence per 100.000 people and other statistics in a dedicated COVID-19 website. [1] Links to the COVID-19 website report feature prominently on the Ministry of Health website and the National Network on Epidemiological Surveillance (RENAVE). [2,3]

[1] National Epidemiology Centre (Centro Nacional de Epidemiología). "Covid-19". [https://cnecovid.isciii.es/covid19/]. Accessed 10 December 2020

[2] National Network on Epidemiological Surveillance (RENAVE). "Health Surveilance (Vigilancia en Salud Pública)".
 [https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/Paginas/default.aspx]. Accessed 10 December 2020

[3] Ministry of Health (Ministerio de Salud). [https://www.mscbs.gob.es/]. Accessed 10 December 2020

2.4.4 Ethical considerations during surveillance

2.4.4a

Is there legislation and/or regulations that safeguard the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities?

Yes = 1 , No = 0

Current Year Score: 1

Spain has laws to safeguard the confidentiality of identifiable health information for individuals such as that generated through health surveillance activities. Spain's published surveillance data are aggregate records and are protected under Article 8 of Decree 2210/1995, which establishes the National Network on Epidemiological Surveillance (Red Nacional de Vigilancia Epidemiologia, RENAVE), ensuring privacy protections. Article 8.2 states that "at all levels of the National Epidemiological Surveillance Network, the necessary measures will be adopted to guarantee data security, leaving all those who, by virtue of their competencies, have access to them, subject to the duty of confidentiality". [1] In addition, the confidentiality of identifiable health information for individuals is safeguarded by the EU's General Data Protection Regulation, which came into force in May 2018. [2] A working group on Health Data Protection from the Spanish Epidemiology Society in 2015 considered the use of personal data in health research or health reporting without the informed consent of the subjects or without completely anonymized data, under the current legislation to be practically impossible in Spain. [3]

 Official Bulletin (Boletin Oficial). 1995. "Decree 2210/1995 which creates the National Network of Epidemiological Surveillance" ("Decreto 2210/1995, por el que se crea la red nacional de vigilancia epidemiológica.").
 [https://www.boe.es/buscar/act.php?id=BOE-A-1996-1502]. Accessed 11 December 2020
 [2] Official Journal of the European Union. 2016. "REGULATION (EU) 2016/679 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)". [https://eurlex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32016R0679&from=EN]. Accessed 11 December 2020
 [3] Spanish Epidimeology Society (Sociedad Espanola de Epidemiologia). "Working Group on Confidentiality and Data

COUNTRY SCORE JUSTIFICATIONS AND REFERENCES


Protection (Grupo de Trabajo sobre Confidencialidad y Protección de Datos)". [https://www.seepidemiologia.es/gruposdetrabajo.php?contenido=gruposdetrabajosub10]. Accessed 11 December 2020

2.4.4b

Is there legislation and/or regulations safeguarding the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities, include mention of protections from cyber attacks (e.g., ransomware)?

Yes = 1 , No = 0

Current Year Score: 1

There is public evidence that the laws, regulations, or guidelines safeguarding the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities, include mention of protections from cyber attacks. The confidentiality of identifiable health information for individuals is safeguarded by the EU Law 2016/679 on General Data Protection Regulation (GDPR) in Spain, which came into force in May 2018. Article 9 of GPRD creates specific provisions for data obtained for public health studies, which include surveillance activities. GDPR also contains stipulations around network and information security, including a requirement that data held by state authorities must be overseen by a dedicated data protection officer who is proficient in dealing with cyber attacks and a requirement to inform all affected individuals within 72 hours of discovering a data breach. [1] There is no evidence of further national legislation on protection of health data from cyber attacks, as Spain's Law on the Protection of Data Privacy and Digital Rights, from October 2018, does not address this topic; and there are is no further legislation issued by the National Data Protection Agency. [2, 3]

[1] Official Journal of the European Union. 2016. "REGULATION (EU) 2016/679 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)". [https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32016R0679&from=EN]. Accessed 11 December 2020.
[2] Official Bulletin (Boletin Oficial). 2018. "Organic Law on the Protection of Data Privacy and Digital Rights" ("Proyecto de Ley Orgánica de Protección de Datos Personales y Garantía de los Derechos Digitales").
[http://www.congreso.es/public_oficiales/L12/CONG/BOCG/A/BOCG-12-A-13-4.PDF]. Accessed 11 December 2020.
[3] Spanish Data Protection Agency (Agencia Espanola de Proteccion de Datos). [https://www.aepd.es/es]. Accessed 11 December 2020.

2.4.5 International data sharing

2.4.5a

Has the government made a commitment via public statements, legislation and/or a cooperative agreement to share surveillance data during a public health emergency with other countries in the region?

Yes, commitments have been made to share data for more than one disease = 2, Yes, commitments have been made to share data only for one disease = 1, No = 0

Current Year Score: 2

There is evidence that Spain's government has made commitments via a cooperative agreement to share surveillance data for more than one disease during a public health emergency with other countries in the European Union. As a member of the European Union, Spain shares surveillance data during a public health emergency with other countries in the region. All EU and EEA countries are part of the European Centre for Disease Prevention and Control's Early Warning and Response System (EWRS). The EWRS is a platform to "allow exchange of information on risk assessment and risk management for more timely,

efficient and coordinated public health action. The EWRS is used for notifications on outbreaks, exchanging information and decisions about the coordination of measures among Member States. Over the years, it has played an important role to support health crisis related to severe acute respiratory syndrome (SARS), Ebola virus disease, avian influenza in humans or COVID-19 and other communicable diseases. [1] Article 9 of Chapter IV of the European Union (EU) Decision on Serious Cross-Border Threats to Health notes that the European Commission "shall make available to the national competent authorities through the EWRS any information that may be useful for coordinating the responses, including information related to serious cross-border threats to health and public health measures related to serious cross-border threats to health and public health measures related to serious of Union law or the Euratom Treaty." [2]

 [1] European Centre for Disease Prevention and Control. "Early Warning and Response System (EWRS)."
 [https://ecdc.europa.eu/en/early-warning-and-response-system-ewrs]. Accessed 11 December 2020
 [2] Decision No 1082/2013/EU of the European Parliament and of the Council of 22 October 2013 on Serious Cross-Border Threats to Health and Repealing Decision No 2119/98/EC. Official Journal of the European Union.
 [https://ec.europa.eu/health/sites/health/files/preparedness_response/docs/decision_serious_crossborder_threats_221020
 13_en.pdf]. Accessed 11 December 2020

2.5 CASE-BASED INVESTIGATION

2.5.1 Case investigation and contact tracing

2.5.1a

Is there a national system in place to provide support at the sub-national level (e.g. training, metrics standardization and/or financial resources) to conduct contact tracing in the event of a public health emergency?

Yes, there is evidence that the national government supports sub-national systems to prepare for future public health emergencies = 2, Yes, there is evidence that the national government supports sub-national systems, but only in response to active public health emergencies = 1, No = 0

Current Year Score: 1

There is evidence of a national system in place to provide support at the regional level to conduct contact tracing in the event of a public health emergency in Spain; however, it is only in place for active health emergencies. Spain has disease-specific emergency and response plans for communicable diseases (such as a Covid-19, flu pandemic, or vector-borne diseases suchas chikungunya, dengue and Zika) which highlight the importance of contact tracing to prevent the transmission of the disease. [1,2,3] However the evidence of support for regional-level authorities to expand contact tracing has been focused on a single disease, COVID-19. Regarding COVID-19, in the 'Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)' published in July 2020, the Ministry of Health aimed to expand the number of health workers carrying-out contact tracing to support the regional authorities. [3] To support Regional Health Authorities, in August 2020 the Ministry of Defense had trained 2000 staff on contact tracing activities, which were available for regional authorities to suplement the local network of contact tracing for COVID-19. furthermore, the number of military contact tracers was expanded to 5000 in November to further support the regional authorities in contacting tracing for COVID-19. [4,5] However, outside of COVID-19, there is no evidence of a national system to support regional authorities to expand contact tracing in the websites of the Ministry of Health or in the Centre on the Coordination of Health Alerts and Emergencies (Centro de Coordinación de Alertas y Emergencias Sanitarias, CCAES). [6,7]

[1] Ministry of Health (Ministerio de Salud). "Preparadeness and Response Activities (Actividades de Preparación y Respuesta."). [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/actPre.htm].



Accessed 22 December 2020

[2] Ministry of Health (Ministerio de Salud). 2005. "National Influenza Pandemic Preparedness and Response Plan (Plan nacional de preparación y respuesta ante una pandemia de gripe)".

[https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/docs/PlanGripeEspanol.pdf]. Accessed 22 December 2020

[3] Ministry of Health (Ministerio de Salud). 2020. "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)".

[https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/13.07130720131534059.pdf]. Accessed 22 December 2020 [4] Ministry of Defense (Ministerio de Defensa). 2020. "Defense explains the work of the 2000 military trackers available to the Autonomous Communities (Defensa explica cómo será el trabajo de los 2000 rastreadores militares a disposición de las Comunidades Autónomas)". [https://www.defensa.gob.es/gabinete/notasPrensa/2020/08/DGC-200827-briefing-mediosrastreadores-covid.html]. Accessed 22 December 2020

[5] Ministry of Defense (Ministerio de Defensa). 2020. "The Defense Minister reiterates her offer to the autonomous communities to request more support from the military trackers (La ministra de Defensa reitera su oferta a las comunidades autónomas para que soliciten más apoyo de los rastreadores militares)".

[https://www.defensa.gob.es/gabinete/notasPrensa/2020/08/DGC-200827-briefing-medios-rastreadores-covid.html]. Accessed 22 December 2020

[6] Ministry of Health (Ministerio de Sanidad). [https://www.mscbs.gob.es]. Accessed 15 January 2021

[7] Centre on the Coordination of Health Alerts and Emergencies (Centro de Coordinación de Alertas y Emergencias Sanitarias, CCAES). [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/home.htm]. Accessed 15 January 2021

2.5.1b

Does the country provide wraparound services to enable infected people and their contacts to self-isolate or quarantine as recommended, particularly economic support (paycheck, job security) and medical attention?

Yes, both economic support and medical attention are provided = 2, Yes, but only economic support or medical attention is provided = 1, No = 0

Current Year Score: 0

Spain does not provide wraparound services to enable cases and suspected cases to self-isolate or guarantine as recommended, particularly economic support (paycheck, job security) and medical attention. Although Spain provided wraparound services to allow suspected cases of COVID-19 to self-isolate in 2020, there is no evidence of similar support for any type of public health emergency. In 2020 the Ministry for Social Affairs published a website, "The guide for Access to Urgent Social and Economic Measures to Face the Covid-19 Pandemic (Guia de Facilitacion de Acceso a Medidas urgentes en el Ámbito Social y Económico para Hacer Frente al COVID-19)" listing all government support to the population affected by the coronavirus pandemic: patients infected with the virus, those required to self-isolate and people or businesses affected by government imposed lockdowns. [1] The website lists a wide range of government measures such as a minimum guaranteed income for those affected by the pandemic; economic support to pay-out rent or basic household bills such as electricity; or extension of deadlines to pay-out taxes for small and medium enterprises. [1] The Ministry of Health (Ministerio de Sanidad, Consumo y Bienestar Social) also published the 'Full Inclusion Guide for Home Support During the Coronavirus (Plena Inclusion - Guía de apoyos en casa durante el coronavirus) as a guideline to local health authorities on support they should provide to local population affected by the coronavirus, including phone, online and presential support by people infected by the coronavirus; as well as support for exceptionally affected populations such as the disabled, the young or the elderly who are required to self-isolate. [2,3] However, there is lack of evidence of similar wraparound services for other diseases, in other disease-specific plans such as the flu pandemic, HIV, Hepatitis or vector-borne diseases such as dengue or zika. [4,5,6] There is also a lack of evidence for such support in the Ministry of Health, in the Coordination Centre

for Health Alerts and Emergencies (CCAES) or in the National Network on Epidemiological Surveillance websites. [7,8,9]

[1] Ministry of Social Affairs (Ministerio de Derechos Sociales). "The guide for Access to Urgent Social and Economic Measures to Face the Covid-19 Pandemic (Guia de Facilitacion de Acceso a Medidas urgentes en el Ámbito Social y Económico para Hacer Frente al COVID-19)". [https://www.mscbs.gob.es/ssi/covid19/guia.htm]. Accessed 13 December 2020
[2] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). 2020. "'Full Inclusion Guide for Home Support During the Coronavirus (Plena Inclusion - Guía de apoyos en casa durante el coronavirus)". [https://www.plenainclusion.org/sites/default/files/guia_apoyos_en_casa_durante_el_coronavirus.pdf]. Accessed 13 December 2020

[3] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). 2020. "Covid-19 Psychological Support Helpline (El teléfono de apoyo psicológico por COVID-19)".

[https://www.mscbs.gob.es/gabinete/notasPrensa.do?id=4953]. Accessed 13 December 2020

[4] Ministry of Health (Ministerio de Salud). "Communicable Diseases (Enfermedades Transmisibles").

[https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/home.htm]. Accessed 14 December 2020
 [5] Ministry of Health (Ministerio de Salud). "Preparadeness and Response Activities (Actividades de Preparación y Respuesta."). [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/actPre.htm]. Accessed 16 January 2021

[6] Ministry of Health (Ministerio de Salud). 2005. "National Influenza Pandemic Preparedness and Response Plan (Plan nacional de preparación y respuesta ante una pandemia de gripe)".

[https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/docs/PlanGripeEspanol.pdfhttps://www.mscbs.gob.es /ciudadanos/enfLesiones/enfTransmisibles/docs/PlanGripeEspanol.pdf]. Accessed 16 January 2021

[7] Ministry of Health (Ministerio de Salud). [https://www.mscbs.gob.es/home.htm]. Accessed 16 January 2021

[8] National Network of Epidemiological Surveillance (Red Nacional de Vigilancia Epidemiológica, RENAVE).

[https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/Paginas/default.aspx]. Accessed 16 January 2021

[9] Coordination Centre for Health Alerts and Emergencies (Centro de Coordination de Alertas y Emergencias Sanitarias). "Prepardness and Response Activities (Actividades de Preparación y respuesta)".

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/activPrepRes.htm]. Accessed 16 January 2021

2.5.1c

Does the country make de-identified data on contact tracing efforts for COVID-19 (including the percentage of new cases from identified contacts) available via daily reports (or other format) on government websites (such as the Ministry of Health, or similar)?

Yes = 1 , No = 0

Current Year Score: 0

Spain does not make de-identified data on contact tracing efforts for COVID-19 available via daily reports on government websites. The National Epidemiology Center publishes a wide range of daily data on Covid-19 such as: new daily cases, mortality, 14 day incidence per 100.000 people, transmission rates, number of hospitalizations and other statistics at national and regional level, however the daily report does not include the percentage of new cases from identified contacts. [1] Weekly reports from the Ministry of Health include the percentage of infections which can be traced to a known contact, however this is only published on a weekly basis. [2] There is no evidence of daily reports tracking contact tracing efforts for Covid-19 in the Ministry of Health covid reports website or in the Health Surveillance Agency website. [3,4]



[1] National Epidemiology Centre (Centro Nacional de Epidemiología). "Covid-19". [https://cnecovid.isciii.es/covid19/]. Accessed 13 December 2020

[2] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). 2020. "Main tracking indicators for Covid-19. 10th December Report (Indicadores Principales de Seguimiento de Covid-19. Fecha de informe: 10 - dic - 2020)".

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov/documentos/informe_covid_es_publico_ 2020-12-07.pdf]. Accessed 13 December 2020

[3] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). 2020. "Daily Covid-19 Report. Update 269 from 11th December 2020 (Situacion Covid-19. Fecha de informe: 11 Diciembre 2020)[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov/documentos/Actualizacion_269_CO VID-19.pdf]. Accessed 13 December 2020

[4] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). "Covid 19 Summary (Covid-19 Resumen de la situación).

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov/situacionActual.htm]. Accessed 13 December 2020

2.5.2 Point of entry management

2.5.2a

Is there a joint plan or cooperative agreement between the public health system and border control authorities to identify suspected and potential cases in international travelers and trace and quarantine their contacts in the event of a public health emergency?

Yes, plan(s)/agreement(s) are in place to prepare for future public health emergencies = 2, Yes, but plan(s)/agreement(s) are in place only in response to active public health emergencies = 1, No = 0

Current Year Score: 1

There is evidence that Spain has a joint plan or cooperative agreement between the public health system and border control authorities to identify suspected and potential cases in international travelers and trace and quarantine their contacts in the event of an active public health emergency, but only in response to an ongoing emergency.

Although Spain established provisions for collaboration between the health system and border authorities in 2020 upon the COVID-19 pandemic, there is no evidence of similar agreement for any type of public health emergency. Resolution from the General Directorate of Public Health from 12th of November 2020 mandates all international travelers coming to Spain to perform a Covid-19 test (or have a negative result carried-out in the last 48 hours) and all travelers are required to facilitate their intended location and contact details for further contact in case of contact with a potential Covid-19 case. The decree highlights the importance of coordination between border and national and regional health authorities to share information and coordinate efforts in a case of a health emergency. [1]Also, Resolution 15878 from December 2020 specifies the types of tests and checks to be carried-out for international travelers. [2] Daily reports on Covid-19 indicators outline the proportion of cases imported from another country, which is evidence that potential cases are being tested and tracked in Spain. [3] However, there is lack of evidence of similar colaboration between the health system and border authorities for any health emergency, in other disease-specific plans such as the flu pandemic, HIV, Hepatitis or vector-borne diseases such as dengue or zika. [4,5,6] There is also a lack of evidence for such colaboration in the Ministry of Health, in the Coordination Centre for Health Alerts and Emergencies (CCAES) or in the National Network on Epidemiological Surveillance websites. [7,8,9]

Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). 2020.
 "Resolution of November 11, 2020, of the General Directorate of Public Health, Regarding the Health Controls to be Carried

Out at the Points of Entry in Spain (Resolución de 11 de noviembre de 2020, de la Dirección General de Salud Pública, Relativa a los Controles Sanitarios a Realizar en los Puntos de Entrada de España)".

[https://www.boe.es/diario_boe/txt.php?id=BOE-A-2020-14049]. Accssed 13 December 2020

[2] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). 2020. "Resolution 15878 of December 9 2020, of the General Health Directorate Public, by which the modalities of Diagnostic Tests are specified of Active Infection for SARS-CoV-2 in relation Health Controls to be Carried Out at the Points of Entry in Spain (Resolución de 9 de diciembre de 2020, de la Dirección General de Salud Pública, por la que se especifican las modalidades de Pruebas Diagnósticas de Infección Activa para SARS-CoV-2 en relación con los controles sanitarios a realizar en los puntos de entrada de España). [https://www.mscbs.gob.es/profesionales/saludPublica/sanidadExterior/CHS/Pdf/BOE-A-2020-15878.pdf]. Accessed 13 December 2020

[3] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). 2020. "Daily Covid-19 Report. Update 269 from 11th December 2020 (Situacion Covid-19. Actualizacion n. 269. Fecha de informe: 11 Diciembre

2020)[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov/documentos/Actualizacion_269_CO VID-19.pdf]. Accessed 13 December 2020

[4] Ministry of Health (Ministerio de Salud). "Communicable Diseases (Enfermedades Transmisibles").

[https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/home.htm]. Accessed 16 January 2021
 [5] Ministry of Health (Ministerio de Salud). "Preparadeness and Response Activities (Actividades de Preparación y Respuesta."). [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/actPre.htm]. Accessed 16 January 2021

[6] Ministry of Health (Ministerio de Salud). 2005. "National Influenza Pandemic Preparedness and Response Plan (Plan nacional de preparación y respuesta ante una pandemia de gripe)".

[https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/docs/PlanGripeEspanol.pdfhttps://www.mscbs.gob.es /ciudadanos/enfLesiones/enfTransmisibles/docs/PlanGripeEspanol.pdf]. Accessed 16 January 2021

[7] Ministry of Health (Ministerio de Salud). [https://www.mscbs.gob.es/home.htm]. Accessed 16 January 2021

[8] National Network of Epidemiological Surveillance (Red Nacional de Vigilancia Epidemiológica, RENAVE).

[https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/Paginas/default.aspx]. Accessed 16 January 2021

[9] Coordination Centre for Health Alerts and Emergencies (Centro de Coordination de Alertas y Emergencias Sanitarias). "Prepardness and Response Activities (Actividades de Preparación y respuesta)".

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/activPrepRes.htm]. Accessed 16 January 2021

2.6 EPIDEMIOLOGY WORKFORCE

2.6.1 Applied epidemiology training program, such as the field epidemiology training program, for public health professionals and veterinarians (e.g., Field Epidemiology Training Program [FETP] and Field Epidemiology Training Program for Veterinarians [FETPV])

2.6.1a

Does the country meet one of the following criteria?

- Applied epidemiology training program (such as FETP) is available in country

- Resources are provided by the government to send citizens to another country to participate in applied epidemiology training programs (such as FETP)

Needs to meet at least one of the criteria to be scored a 1 on this measure. , Yes for both = 1 , Yes for one = 1 , No for both =



Current Year Score: 1

Spain offers applied epidemiology training programmes in-country and the government provides resources to send citizens to another country to participate in applied epidemiology training programmes through European Programme for Intervention Epidemiology Training (EPIET). As a member of the EU, Spain is one of the member state hosts of the European Programme for Intervention Epidemiology Training (EPIET), organised by the European Centre for Disease Prevention and Control (ECDC) and in Spain it is operated and managed by the Carlos III Health Institute. Through EPIET, the government provides resources to send citizens to another country to participate in applied epidemiology training programs. [1,2] Spain is also a regional provider of FETP training, such as the "Introductory Course to Intervention Epidemiology" organized 8-19th July 2019 at the Instituto de Salud Carlos III in Madrid, for the Mediterranean Programme for Intervention Epidemiology (MEDIPIET) which trained staff from 16 European and Mediterranean countries [3]. Other than EPIET, there is no evidence of other resources for citizens to participate in applied epidemiology training programmes in other countries on the website of the Ministry of Health. [4]

[1] European Centre for Disease Prevention and Control. "Institutes / training sites." [https://ecdc.europa.eu/en/epieteuphem/institutes]. Accessed 14 December 2020

[2] Training Programs in Epidemiology and Public Health Interventions Network. "European Programme for Intervention Epidemiology Training (EPIET) and the European Programme for Public Health Microbiology Training (EUPHEM)". [https://www.tephinet.org/training-programs/european-programme-for-intervention-epidemiology-training-epiet-and-theeuropean]. Accessed 14 December 2020

[3] The Mediterranean Programme for Intervention Epidemiology (MEDIPIET). 2019. "Module 1 - Introductory course in intervention epidemiology". [https://medipiet.org/portfolio/module-1/]. Accessed 14 December 2020

[4] Spain Ministry of Health, Consumer Affairs and Social Welfare. [https://www.mscbs.gob.es/]. Accessed 14 December 2020

2.6.1b

Are the available field epidemiology training programs explicitly inclusive of animal health professionals or is there a specific animal health field epidemiology training program offered (such as FETPV)?

Yes = 1 , No = 0

Current Year Score: 1

Spain's field epidemiology training programs are explicitly inclusive of animal health professionals. As a member of the EU, Spain is one of the member state hosts of the European Programme for Intervention Epidemiology Training (EPIET), organised by the European Centre for Disease Prevention and Control (ECDC) and in Spain it is operated and managed by the Carlos III Health Institute. EPIET is a European field epidemiology training program, which is inclusive of animal health professionals. [1,2] Additionally, the European Public Health Microbiology Training Programme (EUPHEM) training offered by the Carlos III Health Institute's National Microbiology Centre (Centro Nacional de Microbiologia, CNM) includes EU microbiologists with a medical, veterinary or environmental microbiology background, given that CNM's scientific and technical functional areas include veterinary, alongside genomics, electron microscopy, structural microscopy, among others. [3]

[1] European Centre for Disease Prevention and Control. "Institutes / training sites." [https://ecdc.europa.eu/en/epieteuphem/institutes]. Accessed 14 December 2020

[2] Training Programs in Epidemiology and Public Health Interventions Network. "European Programme for Intervention Epidemiology Training (EPIET) and the European Programme for Public Health Microbiology Training (EUPHEM)". [https://www.tephinet.org/training-programs/european-programme-for-intervention-epidemiology-training-epiet-and-theeuropean]. Accessed 14 December 2020



[3] Training Programs in Epidemiology and Public Health Interventions Network. 2019. "TEPHINET Member Programs".
 [https://www.tephinet.org/sites/tephinet/files/content/attachment/2019-05 10/TEPHINET%20Member%20Programs%20at%20a%20Glance.pdf]. Accessed 14 December 2020

2.6.2 Epidemiology workforce capacity

2.6.2a

Is there public evidence that the country has at least 1 trained field epidemiologist per 200,000 people? Yes = 1 , No = 0

Current Year Score: 0

2020

Completed JEE assessments; Economist Impact analyst qualitative assessment based on official national sources, which vary by country

Category 3: Rapid response to and mitigation of the spread of an epidemic

3.1 EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

3.1.1 National public health emergency preparedness and response plan

3.1.1a

Does the country have an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with epidemic or pandemic potential?

Evidence that there is a plan in place, and the plan is publicly available = 2, Evidence that the plan is in place, but the plan is not publicly available OR, Disease-specific plans are in place, but there is no evidence of an overarching plan = 1, No evidence that such a plan or plans are in place = 0

Current Year Score: 1

Spain does not have an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with epidemic or pandemic potential although there is evidence of disease-specific plans. Spain has standalone emergency planning and response plans for communicable diseases such as a flu pandemic, HIV, Hepatitis C, SARS, and vector-borne diseases including chikungunya, dengue and Zika and a protocol for biological terrorism in case of an anthrax attack. [1,2,3] All of these plans are standalone plans for single diseases, and are published separately by the Ministry of Health's emergency management agency, the Coordination Centre for Health Alerts and Emergencies (Centro de Coordination de Alertas y Emergencias Sanitarias, CCAES) or the Coordination of the National System of Early Warning and Rapid Response (Coordinación de Sistema Nacional de Alerta Precoz y Respuesta Rápida, SIAPR). In July 2020 the Ministry of Health also published an "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)" outlining vigilance, comunication and response measures to control the pandemic. [4] However there is no evidence of an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with pandemic potential, in the Ministry of Health, in the

Coordination Centre for Health Alerts and Emergencies (CCAES) or in the National Network on Epidemiological Surveillance websites. [5,6,7]

[1] Ministry of Health (Ministerio de Salud). "Communicable Diseases (Enfermedades Transmisibles").

[https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/home.htm]. Accessed 14 December 2020 [2] Ministry of Health (Ministerio de Salud). "Preparadeness and Response Activities (Actividades de Preparación y Respuesta."). [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/actPre.htm]. Accessed 14 December 2020

[3] Ministry of Health (Ministerio de Salud). 2005. "National Influenza Pandemic Preparedness and Response Plan (Plan nacional de preparación y respuesta ante una pandemia de gripe)".

[https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/docs/PlanGripeEspanol.pdf]. Accessed 14 December 2020

[4] Ministry of Health (Ministerio de Salud). 2020. "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)".

[https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/13.07130720131534059.pdf]. Accessed 14 December 2020

[5] Ministry of Health (Ministerio de Salud). [https://www.mscbs.gob.es/home.htm]. Accessed 16 January 2021

[6] National Network of Epidemiological Surveillance (Red Nacional de Vigilancia Epidemiológica, RENAVE).

[https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/Paginas/default.aspx]. Accessed 16 January 2021

[7] Coordination Centre for Health Alerts and Emergencies (Centro de Coordination de Alertas y Emergencias Sanitarias). "Prepardness and Response Activities (Actividades de Preparación y respuesta)".

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/activPrepRes.htm]. Accessed 16 January 2021

3.1.1b

If an overarching plan is in place, has it been updated in the last 3 years?

Yes = 1 , No /no plan in place= 0 Current Year Score: 0

There is no evidence that Spain has an overarching national public health emergency response plan which has been updated in the last 3 years. Spain has disease-specific emergency plans, however there is no evidence of an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with pandemic potential, in the Ministry of Health, in the Coordination Centre for Health Alerts and Emergencies (CCAES) or in the National Network on Epidemiological Surveillance websites. [1,2,3,4,5]

[1] Ministry of Health (Ministerio de Salud). "Communicable Diseases (Enfermedades Transmisibles").

[https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/home.htm]. Accessed 14 December 2020 [2] Ministry of Health (Ministerio de Salud). "Preparadeness and Response Activities (Actividades de Preparación y Respuesta."). [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/actPre.htm]. Accessed 14 December 2020

[3] Ministry of Health (Ministerio de Salud). [https://www.mscbs.gob.es/home.htm]. Accessed 14 December 2020

[4] National Network of Epidemiological Surveillance (Red Nacional de Vigilancia Epidemiológica, RENAVE).

[https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/Paginas/default.aspx]. Accessed 14 December 2020

[5] Coordination Centre for Health Alerts and Emergencies (Centro de Coordination de Alertas y Emergencias Sanitarias)."Prepardness and Response Activities (Actividades de Preparación y respuesta)".



[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/activPrepRes.htm]. Accessed 14 December 2020

3.1.1c

If an overarching plan is in place, does it include considerations for pediatric and/or other vulnerable populations? Yes = 1, No /no plan in place= 0

Current Year Score: 0

Spain does not have an overarching national public health emergency response plan which includes considerations for pediatric and other vulnerable populations. Spain has disease-specific emergency plans, however there is no evidence of an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with pandemic potential, in the Ministry of Health, in the Coordination Centre for Health Alerts and Emergencies (CCAES) or in the National Network on Epidemiological Surveillance websites. [1,2,3,4,5]

[1] Ministry of Health (Ministerio de Salud). "Communicable Diseases (Enfermedades Transmisibles").

[https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/home.htm]. Accessed 14 December 2020 [2] Ministry of Health (Ministerio de Salud). "Preparadeness and Response Activities (Actividades de Preparación y Respuesta."). [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/actPre.htm]. Accessed 14 December 2020

[3] Ministry of Health (Ministerio de Salud). [https://www.mscbs.gob.es/home.htm]. Accessed 14 December 2020

[4] National Network of Epidemiological Surveillance (Red Nacional de Vigilancia Epidemiológica, RENAVE).

[https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/Paginas/default.aspx]. Accessed 14 December 2020

[5] Coordination Centre for Health Alerts and Emergencies (Centro de Coordination de Alertas y Emergencias Sanitarias). "Prepardness and Response Activities (Actividades de Preparación y respuesta)".

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/activPrepRes.htm]. Accessed 14 December 2020

3.1.1d

Does the country have a publicly available plan in place specifically for pandemic influenza preparedness that has been updated since 2009?

Yes = 1 , No = 0

Current Year Score: 0

2020

WHO Strategic Partnership for IHR and Health Security (SPH)

3.1.2 Private sector involvement in response planning

3.1.2a

Does the country have a specific mechanism(s) for engaging with the private sector to assist with outbreak emergency preparedness and response?

Yes = 1 , No = 0



Current Year Score: 0

Spain does not have mechanisms for engaging with the private sector to assist with outbreak emergency preparedness and response. Law 16/2003, on the Cohesion and Quality of the National Health System (Ley de Cohesión y Calidad del Servicio Nacional de Salud) indicates the need for collaboration between public and private services in the provision of health services, however it does not outline any explicit mechanisms for collaboration with the private sector. [1] There is evidence of the public sector request assistance from the private sector in disease-specific cases, such as during the COVID-19 pandemic, but these disease-specific and do not constitute an actual mechanism for engaging with the private sector. Upon the Covid-19 pandemic the Spanish government published "Decree 463/2020 on the Emergency State to Manage the Sanitary Crisis Resulting from Covid-19 (Estado de Alarma para la Gestión de la Situación de Crisis Sanitaria Ocasionada por el Covid-19)", establishing that privately owned health facilities could contribute to strengthening the National Health System if required by the Ministry of Health. [1] This decree was further regulated by Order 232/2020 from the Ministry of Health, giving powers to local authorities to use private health facilities to help the burden of the public health system. [2,3] Regional Health Authorities such as Madrid have then used private health providers, such as private hospitals to assist patients infected with Covid-19. [4]. Outside of the Covid-19 pandemic, there is only evidence that Spain involves the private sector to cover prevention activities internal to businesses. To that effect, as part of Spain's emergency preparedness plan for a flu pandemic, there's a continuity plan for the private sector ("Plan de continuidad de las empresas frente a emergencias pandemia de gripe".) The plan informs businesses on actions to take in case of a pandemic, including a list of steps on how to elaborate an internal emergency plan within companies, encouraging telecommuting, identifying essential employees, isolating workers who have contracted the flu, revising insurance options, among others, but it lacks evidence of a mechanism for engaging with the previate sector. [5] There is also lack of evidence of mechanisms for engaging with the prevate sector in the Ministry of Health, in the Coordination Centre for Health Alerts and Emergencies (CCAES) or in the National Network on Epidemiological Surveillance websites. [6,7,8]

[1] Official Bulletin (Boletin Oficial). 2020. "Decree 463/2020 on the Emergency State to Manage the Sanitary Crisis Resulting from Covid-19 (Estado de Alarma para la Gestión de la Situación de Crisis Sanitaria Ocasionada por el Covid-19)".
[https://www.boe.es/boe/dias/2020/03/14/pdfs/BOE-A-2020-3692.pdf]. Accessed 15 December 2020
[2] Official Bulletin (Boletin Oficial). 2020. (Order SND/232/2020, on the adoption of measures in matter of human resources and means for managing the situation of health crisis caused by COVID-19. (Orden SND/232/2020, por la que se adoptan medidas en materia de recursos humanos y medios para la gestión de la situación de crisis sanitaria ocasionada por el COVID-19)". [https://www.boe.es/boe/dias/2020/03/15/pdfs/BOE-A-2020-3702.pdf]. Accessed 15 December 2020

[3] El Confidencial. 2020. "The Government intervenes in private healthcare to fight the virus and recruits doctors (El Gobierno interviene la sanidad privada para luchar contra el virus y recluta médicos).

[https://www.elconfidencial.com/espana/2020-03-15/comparecencia-ministros-decreto-alarma-moncloa_2499496/]. Accessed 15 December 2020

[4] Comunidad Madrid. 2020. "We launch a historic plan that will unite public and private health (Ponemos en marcha un plan histórico que unirá la sanidad pública y privada)". [https://www.comunidad.madrid/noticias/2020/03/12/ponemos-marcha-plan-historico-unira-sanidad-publica-privada]. Accessed 15 December 2020

[5] Ministry of Health (Ministerio de Sanidad). "Continuity Plan due to Emergencies - Flu Pandemic (Plan de continuidad de las empresas frente a emergencias - pandemia de gripe).

[https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/docs/EmpresasPlan2.pdf]. Accessed 15 December 2020

[6] Ministry of Health (Ministerio de Salud). [https://www.mscbs.gob.es/home.htm]. Accessed 16 January 2021

[7] National Network of Epidemiological Surveillance (Red Nacional de Vigilancia Epidemiológica, RENAVE).

[https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/Paginas/default.aspx]. Accessed 16 January 2021

[8] Coordination Centre for Health Alerts and Emergencies (Centro de Coordination de Alertas y Emergencias Sanitarias).

"Prepardness and Response Activities (Actividades de Preparación y respuesta)". [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/activPrepRes.htm]. Accessed 16 January 2021

3.1.3 Non-pharmaceutical interventions planning

3.1.3a

Does the country have a policy, plan and/or guidelines in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic?

Yes, a policy, plan and/or guidelines are in place for more than one disease= 2, Yes, but the policy, plan and/or guidelines exist only for one disease = 1, No = 0

Current Year Score: 2

Spain has plans in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic for multiple diseases. In July 2020 the Ministry of Health launched the Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19) which outlines non-pharmaceutical interventions (NPIs) such as home confinement, face masks, social distancing, etc. to improve protection and reduce the risk of infection of Covid-19. The plan outlines different sets of guidelines and measures depending on the number of cases in the country/region, e.g.: recommendation for home confinement when the number of new cases are controlled, but the confinement should be mandatory when there is higher disease propagation. The plan explicitly mentions the NPIs are not only to protect against Covid-19, but aim to improve protection and reduce the risk of infection of communicable diseases in various settings (primary or secondary health care settings, elderly care homes, workplaces, public transports, homes). [1] The Flu disease prevention plan also outlines NPIs such as guidelines for home confinement, social distancing or face masks. [2] Other disease-specific plans, such as the vector-borne diseases including chikungunya, dengue and Zika also outline NPIs in affected areas, such as the use of mosquito nets, insect repellents, etc. [3]

[1] Ministry of Health (Ministerio de Salud). 2020. "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)".

[https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/13.07130720131534059.pdf]. Accessed 14 December 2020 [2] Ministry of Health (Ministerio de Salud). 2005. "National Influenza Pandemic Preparedness and Response Plan (Plan nacional de preparación y respuesta ante una pandemia de gripe)".

[https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/docs/PlanGripeEspanol.pdf]. Accessed 14 December 2020

[3] Ministry of Health (Ministerio de Salud). 2016. "National Preparedness and Response Plan for vector-borne diseases(Plan nacional de preparación y respuesta frente a enfermedades transmitidas por vectores)".

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/doc/Plan_Nac__enf__vectores_2 0160720.pdf]. Accessed 24 April 2021

3.2 EXERCISING RESPONSE PLANS

3.2.1 Activating response plans

3.2.1a

Does the country meet one of the following criteria?

- Is there evidence that the country has activated their national emergency response plan for an infectious disease outbreak in the past year?



- Is there evidence that the country has completed a national-level biological threat-focused exercise (either with WHO or separately) in the past year?

Needs to meet at least one of the criteria to be scored a 1 on this measure. , Yes for both = 1 , Yes for one = 1 , No for both = 0

Current Year Score: 1

Spain has activated the national emergency response plan for an infectious disease outbreak in the past year, however there is no evidence of a national-level biological threat exercise in the past year. Upon the Covid-19 pandemic the Spanish government published and activated several pieces of lesgislation and plans to help dealing with the outbreak. The Ministry of Health has published and executed a Rapid Response Plan in July 2020 to guide the health services in a coordinated response to the disease outbreak. [1] There is evidence of a biological-threat exercise in Spain, however it was more than 1 year ago, in 2014 [2]. There is no evidence to suggest that Spain has conducted a biological threat-focused exercise in the last year on the websites of the Ministry of Health (including the emergency management agency's website), Ministry of Agriculture and the World Health Organisation's (WHO) country page. [3,4,5,6]

[1] Ministry of Health (Ministerio de Salud). 2020. "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)".

[https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/13.07130720131534059.pdf]. Accessed 15 December 2020 [2] EuropaPress. 2014. "Vigo hosts a emergency exercise with potential radioactive risk (Vigo acoge un simulacro de emergencias de riesgo radiactivo)". [https://www.europapress.es/galicia/noticia-puerto-vigo-acoge-primera-vez-espanasimulacro-emergencias-riesgo-biologico-radiactivo-20140521151559.html]. Accessed 15 December 2020

[3] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). [https://www.mscbs.gob.es/en/]. Accessed 15 December 2020

[4] Ministry of Health - Coordination Center for Health Alerts and Emergencies (Ministerio de Salud - Centro de Coordination de Alertas y Emergencias Sanitarias, CCAES). "Preparedness and response activities" ("Actividades de preparación y respuesta"). [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/actPre.htm]. Accessed 15 December 2020

[5] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). [https://www.mapa.gob.es/]. Accessed 15 December 2020

[6] World Health Organisation (WHO). "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH) - Spain". [https://extranet.who.int/sph/country/spain]. Accessed 15 December 2020

3.2.1b

Is there evidence that the country in the past year has identified a list of gaps and best practices in response (either through an infectious disease response or a biological-threat focused exercise) and developed a plan to improve response capabilities?

Yes, the country has developed and published a plan to improve response capacity = 2 , Yes, the country has developed a plan to improve response capacity, but has not published the plan = 1, No = 0

Current Year Score: 0

There is insufficient evidence that Spain has undergone an exercise to identify a list of gaps and best practices either through an infectious disease response or a biological threat-focused exercise during the past year. The government has launched plans to help improve COVID-19 response, such as the Rapid Response Plan to Control a COVID-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19), however these do not have a gap analysis or after action reviews. [1] There is evidence of a biological-threat exercise in Spain, however it was more than 1 year ago in 2014. [2] There is no further evidence to suggest that Spain has conducted either an infectious disease response or a

biological threat-focused exercise on the websites of the Ministry of Health (including the emergency management agency's website) Ministry of Agriculture and the World Health Organisation's (WHO) country page and IHR page for Spain. [3,4,5,6]

[1] Ministry of Health (Ministerio de Salud). 2020. "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)".

[https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/13.07130720131534059.pdf]. Accessed 15 December 2020
[2] EuropaPress. 2014. "Vigo hosts a emergency exercise with potential radioactive risk (Vigo acoge un simulacro de emergencias de riesgo radiactivo)". [https://www.europapress.es/galicia/noticia-puerto-vigo-acoge-primera-vez-espana-simulacro-emergencias-riesgo-biologico-radiactivo-20140521151559.html]. Accessed 15 December 2020
[3] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social).

[https://www.mscbs.gob.es/en/]. Accessed 15 December 2020

[4] Ministry of Health - Coordination Center for Health Alerts and Emergencies (Ministerio de Salud - Centro de Coordination de Alertas y Emergencias Sanitarias, CCAES). "Preparedness and response activities" ("Actividades de preparación y respuesta"). [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/actPre.htm]. Accessed 15 December 2020

[5] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). [https://www.mapa.gob.es/]. Accessed 15 December 2020

[6] World Health Organisation (WHO). "Strategic Partnership for International Health Regulations (2005) and Health Security (SPH) - Spain". [https://extranet.who.int/sph/country/spain]. Accessed 15 December 2020

3.2.2 Private sector engagement in exercises

3.2.2a

Is there evidence that the country in the past year has undergone a national-level biological threat-focused exercise that has included private sector representatives?

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of a national-level biological threat exercise in the past year that has included private-sector representatives. There is evidence of a radiactive and biological-threat exercise in Spain, however it was more than 1 year ago in 2014 [1]. There is no evidence to suggest that Spain has conducted a biological threat-focused exercise in the last year on the websites of the Ministry of Health (including the emergency management agency's website), Ministry of Agriculture and the World Health Organisation's (WHO) country page. [2,3,4,5]

[1] EuropaPress. 2014. "Vigo hosts a emergency exercise with potential radioactive risk (Vigo acoge un simulacro de emergencias de riesgo radiactivo)". [https://www.europapress.es/galicia/noticia-puerto-vigo-acoge-primera-vez-espana-simulacro-emergencias-riesgo-biologico-radiactivo-20140521151559.html]. Accessed 15 December 2020

[2] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social).

[https://www.mscbs.gob.es/en/]. Accessed 15 December 2020

[3] Ministry of Health - Coordination Center for Health Alerts and Emergencies (Ministerio de Salud - Centro de Coordination de Alertas y Emergencias Sanitarias, CCAES). "Preparedness and response activities" ("Actividades de preparación y respuesta"). [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/actPre.htm]. Accessed 15 December 2020

[4] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). [https://www.mapa.gob.es/]. Accessed 15 December 2020

[5] World Health Organisation (WHO). "Strategic Partnership for International Health Regulations (2005) and Health Security



(SPH) - Spain". [https://extranet.who.int/sph/country/spain]. Accessed 15 December 2020

3.3 EMERGENCY RESPONSE OPERATION

3.3.1 Emergency response operation

3.3.1a

Does the country have in place an Emergency Operations Center (EOC)?

Yes = 1 , No = 0

Current Year Score: 1

Spain has in place a specific Emergency Operations Centre for health-related emergencies. Spain's Coordination Centre for Health Alerts and Emergencies (Centro de Coordinación de Alertas y Emergencias Sanitarias, CCAES) an agency of the Ministry of Health's General Directorate, coordinates all health emergencies with the relevant networks such as the National Network of Epidemiological Surveillance (RENAVE), the Laboratory Network on Biological Alert (RE-LAB), the State Network of Hemovigilance (Red Estatal Hemovigilancia), and others. [1] During the COVID-19 pandemic in 2020, CCAES website was a hub of information, including latest news on the pandemic, provided information to the population, published technical documents for professionals and updates for the press. [2]

[1] Ministry of Health. 2013. "Early Warning and Rapid Response System (Sistema de Alerta Precoz y Respuesta Rapida)".
 [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/SIARP/Msssi_SIAPR_21032013.pdf]. Accessed 15 December 2020

[2] Ministry of Health (Ministerio de Sanidad). "New coronavirus disease, Covid-19 (Enfermedad por nuevo coronavirus, COVID-19)". [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov/home.htm]. Accessed 15 December 2020

3.3.1b

Is the Emergency Operations Center (EOC) required to conduct a drill for a public health emergency scenario at least once per year or is there evidence that they conduct a drill at least once per year? Yes = 1, No = 0

Current Year Score: 0

Although there is evidence to suggest that Spain's Emergency Operations Centre is required to conduct drills, there is insufficient evidence to support that they need to be conducted on an annual basis or that they are conducted annually in practice. Spain's Coordination Centre for Health Alerts and Emergencies (Centro de Coordinación de Alertas y Emergencias Sanitarias, CCAES) conducts simulations nationally and with international partners, however there is no evidence that drills have to be conducted annually on the website of the Ministry of Health and in CCAES documents. [1] Neither the 2004 regulation that established the CCAES, nor the 2006 regulation that designated it as Spain's EOC in line with Article 4 of the International Health Regulations do not specify a requirement for any drills, simulations or exercises. [2,3] A 2013 plan on the Early Warning System and Rapid Response indicates that drills are required, but does not specify their frequency. [4] There is similarly insufficient evidence to indicate that drills are conducted on an annual basis, even without a requirement.

 [1] Ministry of Health (Ministerio de Sanidad). "Preparation and Response Activities" ("Actividades de Preparacion y Respuesta"). [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/activPrepRes.htm].
 Accessed 15 December 2020

[2] Ministry of Health (Ministerio de Sanidad). 2004. "Orden SCO/564/2004 which establishes the CCAES" ("Orden SCO/564/2004 por la que se establece el sistema de coordination de alertas y emergencias de Sanidad y Consumo"). [https://www.mscbs.gob.es//profesionales/saludPublica/ccayes/queEsCCAES/docs/orden564.pdf]. Accessed 15 December 2020

[3] Ministry of Health (Ministerio de Sanidad). 2006. "Rule SCO/3870/2006 designating the EOC" ("Orden SCO/3870/2006 por la que se designa el Centro Nacional de Enlace").

[https://www.mscbs.gob.es///profesionales/saludPublica/ccayes/reglamentosanita/docs/orden3870.pdf]. Accessed 15 December 2020

[4] Ministry of Health, Social Services and Equality. 2013. "Early Warning System and Rapid Response (Sistema de Alerta Precoz y Respuesta Rapida)".

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/SIARP/Msssi_SIAPR_21032013.pdf]. Accessed 15 December 2020

3.3.1c

Is there public evidence to show that the Emergency Operations Center (EOC) has conducted within the last year a coordinated emergency response or emergency response exercise activated within 120 minutes of the identification of the public health emergency/scenario?

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence to show that Spain's Emergency Operations Centre can conduct or has conducted within the last year a coordinated emergency response or emergency response exercise activated within 120 minutes of the identification of the public health emergency/scenario. Spain's Centre on the Coordination of Health Alerts and Emergencies (Centro de Coordinación de Alertas y Emergencias Sanitarias, CCAES) has published several health vigilance reports on responses to disease outbreaks in the country in the last year, such as COVID-19, Western Nile Virus or Crimea-Congo Hemorrhagic Fever, however there is no evidence the response was within 120 minutes of the identification of these emergencies. [1] There is no further evidence on the website of the Ministry of Health (including its news updates) or the website of Spain's Centre on the Coordination of Health Alerts and Emergencies (CCAES) that it has or can conduct an emergency response within that timeframe. [2,3] Regarding drills, simulations or exercises, neither the 2004 regulation that established the CCAES, nor the 2006 regulation that designated it as Spain's EOC in line with Article 4 of the International Health Regulations specifies a requirement to conduct such activities. [4,5]

 Ministry of Health (Ministerio de Sanidad). 2020. "Public Health Alerts (Alertas en salud pública activas)".
 [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/alertActu.htm]. Accessed 15 December 2020
 Ministry of Health (Ministerio de Sanidad). "Preparation and Response Activities" ("Actividades de Preparacion y Respuesta"). [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/activPrepRes.htm]. Accessed 15 December 2020

[3] Ministry of Health (Ministerio de Sanidad). 2004. "Orden SCO/564/2004 which establishes the CCAES" ("Orden SCO/564/2004 por la que se establece el sistema de coordination de alertas y emergencias de Sanidad y Consumo"). [https://www.mscbs.gob.es//profesionales/saludPublica/ccayes/queEsCCAES/docs/orden564.pdf]. Accessed 15 December 2020

[4] Ministry of Health (Ministerio de Sanidad). 2006. "Rule SCO/3870/2006 designating the EOC" ("Orden SCO/3870/2006 por la que se designa el Centro Nacional de Enlace").

[https://www.mscbs.gob.es///profesionales/saludPublica/ccayes/reglamentosanita/docs/orden3870.pdf]. Accessed 15 December 2020

[5] Ministry of Health, Social Services and Equality. 2013. "Early Warning System and Rapid Response (Sistema de Alerta



Precoz y Respuesta Rapida)".

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/SIARP/Msssi_SIAPR_21032013.pdf]. Accessed 15 December 2020

3.4 LINKING PUBLIC HEALTH AND SECURITY AUTHORITIES

3.4.1 Public health and security authorities are linked for rapid response during a biological event

3.4.1a

Does the country meet one of the following criteria?

- Is there public evidence that public health and national security authorities have carried out an exercise to respond to a potential deliberate biological event (i.e., bioterrorism attack)?

- Are there publicly available standard operating procedures, guidelines, memorandums of understanding (MOUs), or other agreements between the public health and security authorities to respond to a potential deliberate biological event (i.e., bioterrorism attack)?

Needs to meet at least one of the criteria to be scored a 1 on this measure., Yes for both = 1, Yes for one = 1, No for both = 0

Current Year Score: 1

Spain has in place a publicly available protocol and guidelines between the public health and security authorities to respond to a potential deliberate biological event, and there is evidence that they have carried out an exercise to respond to a potential deliberate biological event. Regarding the first point, Spain has in place a national protocol for an anthrax attack, titled "Protocol of action for the intentional release of bacillus anthracis spores." Published in 2015, the plan was elaborated by the Ministry of Health in conjunction with the National Security Forces and the Ministry of Economy and Competitiveness. There is no evidence that plans or protocols exist for any other types of attacks besides anthrax. [1] Regarding the second point, there is evidence of an exercise to respond to a potential deliberate attack with biological and radioactive agents in Vigo Port in 2014 involving health autorities, civil protection and the military forces. [2]

[1] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). 2015. "Protocol of action for the intentional release of bacillus anthracis spores (Protocolo de actuacion ante una liberacion intencionada de esporas de bacillus anthracis)".

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/doc/Protocolo_Antrax_16.06.201 5.pdf]. Accessed 15 December 2020

[2] EuropaPress. 2014. "Vigo hosts a emergency exercise with potential radioactive risk (Vigo acoge un simulacro de emergencias de riesgo radiactivo)". [https://www.europapress.es/galicia/noticia-puerto-vigo-acoge-primera-vez-espana-simulacro-emergencias-riesgo-biologico-radiactivo-20140521151559.html]. Accessed 15 December 2020

3.5 RISK COMMUNICATIONS

3.5.1 Public communication

3.5.1b

Does the risk communication plan (or other legislation, regulation or strategy document used to guide national public health response) outline how messages will reach populations and sectors with different communications needs (eg different languages, location within the country, media reach)? Yes = 1, No = 0



Current Year Score: 1

Spain's communication strategy used to guide a national public health response has specific provisions for reaching populations with different communications needs. While Spain does not have an overarching communication strategy used to guide national public health responses, its influenza-specific strategy has a communication strategy that addresses reaching vulnerable populations. The National Influenza Pandemic Preparedness and Response Plan provides for different language needs for vulnerable populations, including in the languages of the largest migrant communities in the country. In addition, the plan makes provisions for different types of communication materials, with a focus on "ease of comprehension", including informational pamphlets and written as well as audio-visual information that should be disseminated to various media channels. [1,2] Also, the 2020 Rapid Response Plan to Control a Covid-19 Pandemic Plan (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19) includes provisions to communicate with specific groups such as children, young people, the elderly or people with specific diseases. [3]

[1] Ministry of Health. 2013. "Early Warning and Rapid Response System (Sistema de Alerta Precoz y Respuesta Rapida)".
 [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/SIARP/Msssi_SIAPR_21032013.pdf]. Accessed 15 December 2020.

[2] Ministry of Health (Ministerio de Salud). 2005. "National Influenza Pandemic Preparedness and Response Plan (Plan nacional de preparación y respuesta ante una pandemia de gripe)".

[https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/docs/PlanGripeEspanol.pdf]. Accessed 15 December 2020.

[3] Ministry of Health (Ministerio de Salud). 2020. "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)".

[https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/13.07130720131534059.pdf]. Accessed 15 December 2020

3.5.1 Risk communication planning

3.5.1a

Does the country have in place, either in the national public health emergency response plan or in other legislation, regulation, or strategy documents, a section detailing a risk communication plan that is specifically intended for use during a public health emergency?

Yes = 1 , No = 0

Current Year Score: 1

Spain has in place risk communication strategies intended for use during public health emergencies. There are two communication strategies, the first, a permanent, overarching system focused on detection and response to all important public health events; and the second, from disease-specific plans to communicate in health emergencies such as Covid-19 or the the flu pandemic. The first is Spain's Early Warning and Rapid Response System (Sistema de Alerta Precoz y Respuesta Rapida, SIAPR), which is a permanent, 24/7 communication system for all "important public health events of national or international importance", and was created for the rapid detection of public health threats and emergencies and to coordinate the response to those threats and emergencies. The communication strategy of SIAPR is laid out in its founding document and specifies that SIAPR operates a National Liaison Centre, which coordinates all communication through a network of regional Liaison Centres across Spain's Autonomous Communities, across agencies and with Spain's various surveillance alert networks (the National Network of Epidemiological Surveillance (RENAVE), the Laboratory Network on Biological Alert (RE-LAB), the State Network of Hemovigilance (Red Estatal Hemovigilancia), Rapid Information Exchange System on food-borne illnesses (SCIRI/AESAN), Alert Network on Animal Health (RASVE), among others). [1] The second are communication strategies from disease-specific plans, such as the COVID-19 Rapid Response Plan. In the document, there is

a specific section focusing on the comunication plan, and the need to coordinate the communication across Ministry Agencies, such as the Subdirectorate of Health Promotion and Public Health Surveillance (Subdirección de Promoción de la Salud y Vigilancia en Salud Pública), the Coordination Center Alerts and Health Emergencies (Centro de Coordinación de Alertas y Emergencias Sanitarias, CCAES), the General Sub-Directorate of Citizen Servic (Subdirección General de Atención al Ciudadano) and the Press Office of the Ministry of Health (Gabinete de Prensa del Ministerio de Sanidad), as well as those responsible for the Secretary of State for Communication (Secretaría de Estado de Comunicación). [2] The plan outlines different communication channels such as web, social media or TV, and main messaging campaigns to keep the population informed and reach a wide range of audiences, including those with special needs or underserved. [2]. Similarly, the National Influenza Pandemic Preparedness and Response Plan (Plan nacional de preparación y respuesta ante una pandemia de gripe) also includes a communication strategy with the media, public information campaigns and a strategy for internal coordination within the Ministry of Health's agencies, with the Autonomous Communities, and with other ministries and the Spanish government. [3]

[1] Ministry of Health (Ministerio de Salud). 2013. "Early Warning and Rapid Response System (Sistema de Alerta Precoz y Respuesta Rapida)". [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/SIARP/Msssi_SIAPR_21032013.pdf]. Accessed 16 December 2020

[2] Ministry of Health (Ministerio de Salud). 2020. "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)".

[https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/13.07130720131534059.pdf]. Accessed 16 December 2020 [3] Ministry of Health (Ministerio de Salud). 2005. "National Influenza Pandemic Preparedness and Response Plan (Plan nacional de preparación y respuesta ante una pandemia de gripe)".

[https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/docs/PlanGripeEspanol.pdf]. Accessed 16 December 2020

3.5.1c

Does the risk communication plan (or other legislation, regulation or strategy document used to guide national public health response) designate a specific position within the government to serve as the primary spokesperson to the public during a public health emergency?

Yes = 1 , No = 0

Current Year Score: 0

The risk communication plan does not designate a specific position within the government to serve as the primary spokesperson to the public during a public health emergency. There are two communication strategies, the first, a permanent, overarching system focused on detection and response to all important public health events; and the second, from disease-specific plans to communicate in health emergencies such as COVID-19 or the the flu pandemic. Although in both communication strategies there is a list of Government Agencies which should cooperate to establish an effective communication with the population, there is no evidence of a single entity being responsible as a primary spokesperson to the public during a health emergency. [1,2,3] During the COVID-19 pandemic, the Centre for Coordination of Health Alerts and Emergencies (Centro de Coordinación de Alertas y Emergencias Sanitarias, CCAES) was responsible for press conferences and publising disease reports, however there is no evidence of their designation as primary spokesperson in government plans or the Ministry of Health website. [4,5]

[1] Ministry of Health (Ministerio de Salud). 2013. "Early Warning and Rapid Response System (Sistema de Alerta Precoz y Respuesta Rapida)". [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/SIARP/Msssi_SIAPR_21032013.pdf]. Accessed 16 December 2020

[2] Ministry of Health (Ministerio de Salud). 2020. "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta



Temprana en un Escenario de Control de la Pandemia por Covid-19)".

[https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/13.07130720131534059.pdf]. Accessed 16 December 2020 [3] Ministry of Health (Ministerio de Salud). 2005. "National Influenza Pandemic Preparedness and Response Plan (Plan nacional de preparación y respuesta ante una pandemia de gripe)".

[https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/docs/PlanGripeEspanol.pdf]. Accessed 16 December 2020

[4] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). [https://www.mscbs.gob.es/en/]. Accessed 15 December 2020

[5] Ministry of Health - Coordination Center for Health Alerts and Emergencies (Ministerio de Salud - Centro de Coordination de Alertas y Emergencias Sanitarias, CCAES). "Preparedness and response activities" ("Actividades de preparación y respuesta"). [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/activPreparacionRespuesta/actPre.htm]. Accessed 15 December 2020

3.5.2 Public communication

3.5.2a

In the past year, is there evidence that the public health system has actively shared messages via online media platforms (e.g. social media, website) to inform the public about ongoing public health concerns and/or dispel rumors, misinformation or disinformation?

Public health system regularly shares information on health concerns = 2, Public health system shares information only during active emergencies, but does not regularly utilize online media platforms = 1, Public health system does not regularly utilize online media platforms, either during emergencies or otherwise = 0

Current Year Score: 2

There is evidence that the government uses media platforms to share information on health concerns. The Ministry of Health's Coordination Centre of Health Alerts and Emergencies (CCAES) publishes current health alerts on its website, such as such as: an alert on the Western Nilo Virus published on 25th of September, 9th of October and 3rd of December 2020; the Crimean-Congo hemorrhagic fever published on the 27th of August 2020; or other health alerts such as dengue fever published in August 2020 and May 2019, listeriosis published in September 2019, Chikungunya published in 2017, etc. [1] The Ministry of Health also has accounts in several social media networks, where it shares information about health concerns such as: a Twitter account published in 2010 with 616.000 followers; an Instagram with 660 publications and 373,000 followers; a Facebook account with 870,000 followers; a Youtube account with 11,000 subscribers; or a Tik Tok account recently created in September 2020. [2,3,4,5,6,7] The number of publications and followers has increased in 2020 due to the wide range of information published about COVID-19. In the "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)" there are mentions to several online campaigns such as online videos and infographics for public and health professionals in the Ministry of Health webiste; or a online campaign on instagram and other social media on Covid-19 named "#nolotiresporlaborda" latest updated on Novebmber 2020. [8,9,10]

[1] Ministry of Health (Ministerio de Salud). "Current public health alerts (Alertas en salud publica de actualidad)".
[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/alertActu.htm]. Accessed 16 December 2020
[2] Ministry of Health (Ministerio de Salud). 2020. "Press release - The Ministry of Health launches an official account on the social network TikTok (Notas de Prensa - El Ministerio de Sanidad estrena cuenta oficial en la red social TikTok)".
[https://www.mscbs.gob.es/gabinete/notasPrensa.do?id=5047]. Accessed 17 January 2021
[3] Twitter. Ministry of Health ((Ministerio de Salud). [https://twitter.com/sanidadgob]. Accessed 17 January 2021
[4] Instagram. Ministry of Health ((Ministerio de Salud). [https://www.instagram.com/sanidadgob/?hl=pt]. Accessed 17



January 2021

[5] Facebook. Ministry of Health ((Ministerio de Salud). [https://www.facebook.com/MinSanidad/]. Accessed 17 January 2021
[6] Youtube. Ministry of Health ((Ministerio de Salud). [https://www.youtube.com/user/ministeriosyps]. Accessed 17 January 2021

[7] TikTok. Ministry of Health ((Ministerio de Salud). [https://www.tiktok.com/@sanidadgob?]. Accessed 17 January 2021
[8] Ministry of Health (Ministerio de Salud). 2020. "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)".

[https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/13.07130720131534059.pdf]. Accessed 16 December 2020 [9] Ministry of Health. "Citizen Information" ("Información para la ciudadanía").

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov/ciudadania.htm]. Accessed 16 December 2020

[10] Instagram. "nolotiresporlabord". [https://www.instagram.com/explore/tags/nolotiresporlaborda/]. Accessed 16
 December 2020[1] Ministry of Health. "Current public health alerts" ("Alertas en salud publica de actualidad").
 [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/alertActu.htm]. Accessed 16 December 2020

3.5.2b

Is there evidence that senior leaders (president or ministers) have shared misinformation or disinformation on infectious diseases in the past two years?

No = 1, Yes = 0

Current Year Score: 1

There is no evidence that senior leaders have shared misinformation or disinformation on infectious diseases in the past two years. A search in google on "Spanish Government fake-news or misinformation (bulo gobierno espanol)" does not return any returns on misinformation from senior government leaders on infections diseases. [1] There are news that the government might have has overstated the Spanish ranking position in the number of COVID-19 tests compared with other countries, however it is unclear the source of the information and whether this could be actually missinformation [2]. The government has actually passed legislation to prevent and fight missinformation, through the "National Security Council Order 1030/2020, of October 30 2020, on the Procedure for Action Against Disinformation (Orden PCM/1030/2020, por la que se publica el Procedimiento de actuación contra la desinformación)" giving powers to several government agencies (notably the National Security Council, The Comunication Secretary, the National Intelligence Centre, among others) to identify and block deliberate missinformation published in Spain. [3,4]

[1] Google Search. "bulo gobierno espanol".

[https://www.google.com/search?q=bulo+gobierno+espanol&rlz=1C1CHBF_enPT796PT796&oq=bulo+gobierno+espanol&aq s=chrome..69i57j33i160.14487j0j7&sourceid=chrome&ie=UTF-8]. Accessed 17 December 2020

[2] Digital Freedom (Libertad Digital). 2020 "Despite the government hoaxes, Spain is one of the countries that least follows the advice of scientists against the covid (Pese a los bulos del Gobierno, España es uno de los países que menos sigue el consejo de los científicos contra la covid)". [https://www.libertaddigital.com/ciencia-tecnologia/salud/2020-11-

13/coronavirus-pese-bulos-gobierno-espana-paises-menos-ha-seguido-consejo-cientificos-contra-covid-6680377/]. Accessed 17 December 2020

[3] Official Bulletin (Boletín Oficial). "National Security Council Order 1030/2020, on the Procedure for Action Against Disinformation (Orden PCM/1030/2020, por la que se publica el Procedimiento de actuación contra la desinformación)". [https://boe.es/diario_boe/txt.php?id=BOE-A-2020-13663]. Accessed 17 December 2020

[4] El Pais. "The Government will monitor the networks and give a "political response" to disinformation campaigns (El Gobierno vigilará las redes y dará una "respuesta política" a las campañas de desinformación)".

[https://elpais.com/espana/2020-11-05/espana-dara-una-respuesta-politica-a-las-campanas-de-desinformacion-de-estados-



extranjeros.html]. Accessed 17 December 2020

3.6 ACCESS TO COMMUNICATIONS INFRASTRUCTURE

3.6.1 Internet users

3.6.1a

Percentage of households with Internet Input number

Current Year Score: 90.72

2019

International Telecommunication Union (ITU)

3.6.2 Mobile subscribers

3.6.2a

Mobile-cellular telephone subscriptions per 100 inhabitants Input number

Current Year Score: 118.25

2019

International Telecommunication Union (ITU)

3.6.3 Female access to a mobile phone

3.6.3a

Percentage point gap between males and females whose home has access to a mobile phone Input number

Current Year Score: 0

2019

Gallup; Economist Impact calculation

3.6.4 Female access to the Internet

3.6.4a

Percentage point gap between males and females whose home has access to the Internet Input number

Current Year Score: 8.0



2019

Gallup; Economist Impact calculation

3.7 TRADE AND TRAVEL RESTRICTIONS

3.7.1 Trade restrictions

3.7.1a

In the past year, has the country issued a restriction, without international/bilateral support, on the export/import of medical goods (e.g. medicines, oxygen, medical supplies, PPE) due to an infectious disease outbreak? Yes = 0, No = 1

Current Year Score: 0

Spain has issued restriction without international support on the export of medical goods to another country due to an infectious disease outbreak in the past year. During the Covid-19 pandemic several European countries, including Spain, have implemented controls to restrict exports of medicines and Personal Protective Equipment (PPE), to increase availability of these products to the European citizens. [1] No evidence has been found that Spain has issued any other restrictions on import/export of medical goods on the website of the World Health Organization's Disease Outbreak News or the OIE Weekly Disease Information portal. [2,3] There is also no evidence of additional restrictions on the websites of the ministries of Health, Agriculture or Commerce [4,5,6].

[1] EUR-Lex. 2020. "Commission Implementing Regulation (EU) 2020/402 of 14 March 2020 making the exportation of certain products subject to the production of an export authorisation". [https://eur-lex.europa.eu/legal-content/GA/TXT/?uri=CELEX:32020R0402]. Accessed 18 December 2020
[2] World Health Organisation. "Disease Outbreak News" [http://www.who.int/csr/don/en/]. Accessed 18 December 2020
[3] World Organisation for Animal Health. "Weekly Disease Information".
[https://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI]. Accessed 18 December 2020
[4] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social).
[https://www.mscbs.gob.es/en/]. Accessed 18 December 2020
[5] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). [https://www.mapa.gob.es/].
Accessed 18 December 2020
[6] Ministry of Commerce. "Import and Export Trade Schemes".

[https://comercio.gob.es/ImportacionExportacion/Paginas/Index.aspx]. Accessed 18 December 2020

3.7.1b

In the past year, has the country issued a restriction, without international/bilateral support, on the export/import of nonmedical goods (e.g. food, textiles, etc) due to an infectious disease outbreak?

Yes = 0 , No = 1

Current Year Score: 1

Spain has not issued any restrictions on non-medical goods from another country due to an infectious disease outbreak in the past year. During the Covid-19 pandemic, several European countries, including Spain have implemented border controls controls to restrict exports of medicines and Personal Protective Equipment (PPE), however there is no evidence of bans on non-medical goods. [1,2] No evidence has been found on the website of the World Health Organization's Disease Outbreak

News [3] or the OIE Weekly Disease Information portal [4], in news media, or on the websites of the Ministries of Health or Agriculture and Commerce [5,6,7].

[1] International Trade Centre. "COVID-19 Temporary Trade Measures". [https://www.macmap.org/covid19]. Accessed 17 December 2020

[2] World Customs Organization. "List of national legislation* of countries that adopted temporary export restrictions on certain categories of critical medical supplies in response to COVID-19".

[http://www.wcoomd.org/en/topics/facilitation/activities-and-programmes/natural-disaster/list-of-countries-interval of the second sec

coronavirus.aspx]. Accessed 17 December 2020

[3] World Health Organisation. "Disease Outbreak News" [http://www.who.int/csr/don/en/]. Accessed 18 December 2020[4] World Organisation for Animal Health. "Weekly Disease Information".

[https://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI]. Accessed 18 December 2020

[5] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social).

[https://www.mscbs.gob.es/en/]. Accessed 18 December 2020

[6] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). [https://www.mapa.gob.es/]. Accessed 18 December 2020

[7] Ministry of Commerce. "Import and Export Trade Schemes".

[https://comercio.gob.es/ImportacionExportacion/Paginas/Index.aspx]. Accessed 18 December 2020

3.7.2 Travel restrictions

3.7.2a

In the past year, has the country implemented a ban, without international/bilateral support, on travelers arriving from a specific country or countries due to an infectious disease outbreak?

Yes = 0 , No = 1

Current Year Score: 0

In the past year Spain has implemented a ban, without international/bilateral support, on travelers arriving from a specific country or countries due to an infectious disease outbreak. During the Covid-19 pandemic, in March-April 2020 several European countries including Spain have closed their borders to all travelers, to contain the spread of the disease. [1,2,3] No evidence of other traveler bans has been found on the website of the World Health Organization's Disease Outbreak News [4] or the OIE Weekly Disease Information portal [5], in news media, or on the websites of the Ministries of Health or Agriculture and Commerce [6,7,8].

[1] Official Bulletin (Boletín Oficial). 2020. "Royal Decree 463/2020, of March 14, which declares the state of alarm for the management of the health crisis situation caused by COVID-19 (Real Decreto 463/2020, de 14 de marzo, por el que se declara el estado de alarma para la gestión de la situación de crisis sanitaria ocasionada por el COVID-19)". [https://www.boe.es/eli/es/rd/2020/03/14/463/con]. Accessed 18 December 2020

[2] Ministry of Health (Miniterio de Sanidad). 2020. "Controls at land borders reestablished within the framework of COVID-19 containment measures (Restablecidos los controles en las fronteras terrestres en el marco de las medidas de contención del COVID-19)". [https://www.mscbs.gob.es/gabinete/notasPrensa.do?id=4816]. Accessed 18 December 2020

[3] Business Insider. 2020. "European Borders Closed in Response to COVID-19".

https://www.businessinsider.com/coronavirus-european-borders-closed-in-response-to-covid-19-2020-4

[4] World Health Organisation. "Disease Outbreak News" [http://www.who.int/csr/don/en/]. Accessed 18 December 2020[5] World Organisation for Animal Health. "Weekly Disease Information".

[https://www.oie.int/wahis_2/public/wahid.php/Diseaseinformation/WI]. Accessed 18 December 2020



[6] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). [https://www.mscbs.gob.es/en/]. Accessed 18 December 2020

[7] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). [https://www.mapa.gob.es/]. Accessed 18 December 2020

[8] Ministry of Commerce. "Import and Export Trade Schemes".

[https://comercio.gob.es/ImportacionExportacion/Paginas/Index.aspx]. Accessed 18 December 2020

Category 4: Sufficient and robust health sector to treat the sick and protect health workers

4.1 HEALTH CAPACITY IN CLINICS, HOSPITALS, AND COMMUNITY CARE CENTERS

4.1.1 Available human resources for the broader healthcare system

4.1.1a Doctors per 100,000 people Input number Current Year Score: 387.23

2017

WHO; national sources

4.1.1b

Nurses and midwives per 100,000 people Input number Current Year Score: 572.95

2017

WHO; national sources

4.1.1c

Does the country have a health workforce strategy in place (which has been updated in the past five years) to identify fields where there is an insufficient workforce and strategies to address these shortcomings?

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that Spain has a public health workforce strategy in place. Although international reports have highlighted labour shortages in the medical profession [1] and there is increased pressure from the Union of Medical Professionals (SATSE), following the publication of a study in October 2018 on shortages of health staff, and international reports highlight medical professional shortages [2], there is no evidence that a strategy is in place either at the Ministry of Health, Labour or Education. [3,4,5] Spain does have a National Human Resources Commission, which is responsible for developing training programs and planning activities in support of the human resources of the National Health System specifically, but there is no public evidence of a plan. [6]

[1] OECD. 2017. "Health Policy in Spain". [http://www.oecd.org/health/health-systems/Health-Policy-in-Spain-March-2017.pdf]. Accessed 18 December 2020

 [2] Labor Union of Medical Professionals (SATSE). 2018. "Spains needs 131,000 doctors and nurses" ("España necesita 131.000 enfermeras y enfermeros"). [https://mundosanitario.satse.es/espana-necesita-131-000-enfermeras-y-enfermeros/]
 Accessed 18 December 2020.

[3] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social).

[https://www.mscbs.gob.es/en/]. Accessed 18 December 2020

[4] Ministry of Education and Professional Training (Ministerio de Educacion y Formacion Profesional).

[http://www.educacionyfp.gob.es/portada.html]. Accessed 18 December 2020

[5] Ministry of Labor, Migration and Social Security (Ministry de Trabajo, Migraciones y Seguridad Social).

[http://www.mitramiss.gob.es/]. Accessed 18 December 2020

[6] Government of Spain. "Royal Decree 182/2004 of January 30, on the composition of the Human Resources Commission of the National Health System (Real Decreto 182/2004, de 30 de enero, por el que se determina la composición de la Comisión de Recursos Humanos del Sistema Nacional de Salud)." [https://www.boe.es/eli/es/rd/2004/01/30/182/con]. Accessed 18 December 2020

4.1.2 Facilities capacity

4.1.2a

Hospital beds per 100,000 people Input number Current Year Score: 297

2018

WHO/World Bank; national sources

4.1.2b

Does the country have the capacity to isolate patients with highly communicable diseases in a biocontainment patient care unit and/or patient isolation room/unit located within the country?

Yes = 1 , No = 0

Current Year Score: 1

Spain has the capacity to isolate patients in isolation units. Following the 2014 Ebola incident, 7 hospitals in Spain were equipped with "high level isolation units" (Unidad de Aislamiento de Alto Nivel, UAAN). The hospitals with UAANs are: Hospital de Donostia, Hospital Clínico in Barcelona, Hospital La Fe in Valencia, Hospital Virgen del Rocío in Sevilla, Hospital Nuestra Señora de la Candelaria in Canary Islands and Hospitales La Paz-Carlos III y Gomez Ulla in Madrid. The Hospital La

Paz-Carlos III has so far treated three patients with Ebola and one with Crimean-Congo haemorrhagic fever in its UAAN units, where UAAN has a dedicated floor. The seven hospitals form the Spanish Association for Infectious Diseases and Clinical Microbiology (Sociedad Española de Enfermedades Infecciosas y Microbiología Clinica, SEIMC). [1,2]

[1] Spanish Association for Infectious Diseases and Clinical Microbiology (Sociedad Española de Enfermedades Infecciosas y Microbiología Clínica, SEIMC). "What are high level isolation units? ("¿Qué son las unidades de aislamiento de alto nivel?"). [https://www.seimc.org/contenidos/noticias/2017/seimc-nt-20171102-Que-son-las-unidades-aislamiento-de-alto-nivel.pdf]. Accessed 18 December 2020

[2] Ministry of Health (Ministerio de Sanidad). "High level isolation units (Unidades de aislamiento de alto nivel)". [https://www.mscbs.gob.es/profesionales/CentrosDeReferencia/docs/Fesp/Fesp72.pdf]. Accessed 18 December 2020

4.1.2c

Does the country meet one of the following criteria?

- Is there evidence that the country has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years?

- Is there evidence that the country has developed, updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years?

Yes = 1, No = 0

Current Year Score: 1

There is evidence that Spain has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years. The Ministry of Health has been increasing capacity of isolation units in Spain, to face potential new cases of Crimea-Congo Fever, Ebola, MERS or COVID-19 and also for nuclear, biologic or chemical health emergencies. For example, in May 2021 the Ministry of Health anounced a new biocontainment isolation unit in Hospital Rio Hortega in Valladolid, where 10 new beds will be available from Septbember 2021. [1] In 2020, during the COVID-19 pandemic, the government has published plans to expand the capacity to isolate infected patients. In the "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)" the Ministry of Health developed plans to set-up 37 to 40 isolation beds per 10.000 inhabitants. [2] By April 2021, the Isolation capacity has increased by 300% since February 2020, at the start of the COVID-19 pandemic. [3]

[1] El Dia de Valladolid. 2021. "Rio Hortega Hospital has a new high level islolation unit (El Río Hortega tendrá una UCI de Aislamiento de Alto Nivel)". [https://www.eldiadevalladolid.com/Noticia/Z96BAFFDD-078A-A998-

7DFE3E6FD1DC69F2/202105/El-Rio-Hortega-tendra-una-UCI-de-Aislamiento-de-Alto-Nivel]. Accessed 28 May 2021 [2] Ministry of Health (Ministerio de Salud). 2020. "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)".

[https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/13.07130720131534059.pdf]. Accessed 15 December 2020 [3] CadenaSER. 2021. "Capacity of Intensive Care units has increased by 300% in Spain during the pandemic (La capacidad de las UCI aumenta un 300% en España durante la pandemia)".

[https://cadenaser.com/ser/2021/04/08/sociedad/1617876752_075983.html]. Accessed 28 May 2021



4.2 SUPPLY CHAIN FOR HEALTH SYSTEM AND HEALTHCARE WORKERS

4.2.1 Routine health care and laboratory system supply

4.2.1a

Is there a national procurement protocol in place which can be utilized by the Ministries of Health and Agriculture for the acquisition of laboratory supplies (e.g. equipment, reagents and media) and medical supplies (e.g. equipment, PPE) for routine needs?

Yes for both laboratory and medical supply needs = 2, Yes, but only for one = 1, No = 0

Current Year Score: 2

Spain has a central procurement agency and a protocol in place, which is utilized for all contracting works and the acquisition of all state entity needs, including laboratory and medical needs, by Spain's ministries including those responsible for health and agriculture [1,2]. Article 8 of the Code of Contracts, updated in September 2020, specifies that research laboratories are included in the central procurement protocol, in addition to the general inclusion of clinical laboratories. [2] There is evidence that the procurement platform (the Procurement Platform for the Public Sector) is used by the Ministry of Health, the Ministry of Agriculture and the Carlos III Health Institute, which houses the national reference laboratory network, for the acquisition of all laboratory needs including equipment, inputs and services. [2] Two examples include a procurement request by the Carlos III Health Institute in January 2020 for the supply of laboratory reagents; and a second for the procurement of laboratory material including Personal Protective Equipment such as gloves, protective glasses, gowns from the Malaga University. [3,4] The procurement agency and the platform are housed under the Ministry of the Economy and Public Administration (Ministerio de Hacienda y Administraciones Publicas). [5]

[1] Ministry of Treasury (Ministerio de Hacienda). "Procurement platform" ("Plataforma de contratación").
 [https://contrataciondelestado.es/wps/portal/!ut/p/b1/jY9Lb4MwEIR_UbTrB445GoMNiCROeLT4EnGIUiQII6q_v06USw-h2dtov9HMgId-QwRjKLeSSfgEfxt-

xuvwPS63YbprL85JLaVKiEKpOUcl4rg7qoagJQHoA8Czg9YmpyhrliKt0rYVeZCWPvwv39HTHzHNu7Jzoi4sYpGbtGpJFOzivXx8cQrfy 18B_sn_AL8eQZ_A2sQHsLbhbwtblhGqHfLKOsIwo7DPl_kCfcC2Z9VIR1XEDA_JKTQp3a5xlhJEDg30GmY_GWPiYnRfyy-YVTbb/dl4/d5/L2dJQSEvUUt3QS80SmtFL1o2X0JTODhBQjFBMDhDNDQwQTY5OVZRQVQxME82/]. Accessed 19 December 2020

[2] Official Bulletin (Boletin Oficial). 2018. "Code of Contracts in the Public Sector (Codigo de Contratos del Sector Publico)". [https://boe.es/legislacion/codigos/codigo.php?id=031_Codigo_de_Contratos_del_Sector_Publico&modo=1]. Accessed 19 December 2020

[3] State procurement (Contratacion del estado). 2020. "Formalized contract announcement: Carlos III lab supplies (Anuncio de formalizacion del contrato)". [https://contrataciondelestado.es/wps/wcm/connect/978f6733-6358-41ad-960c-285cb34c5a77/DOC CAN ADJ2020-755199.html?MOD=AJPERES]. Accessed 29 December 2020

[4] State procurement (Contratacion del estado). 2018. "Formalized contract announcement: Malaga University laboratory supplies (Anuncio de formalizacion del contrato)". [https://contrataciondelestado.es/wps/wcm/connect/6e2c2c9d-3a18-49af-ab78-2d200df020c8/DOC_CD2018-413516.html?MOD=AJPERES]. Accessed 19 January 2021.

[5] Ministry of Treasury (Ministerio de Hacienda). "State procurement (Contratacion del Estado)".

[https://contrataciondelestado.es/wps/portal/!ut/p/b1/jY9LDoJAEETPwgmmG6YHZtmgDBA0GBRINoaFMRg-G-

P5VVaaKFq7St5LqoQVNZKPPmkiXxyEHZpbe26u7Tg03bNbdQzLIOAQGYJISmCldbXhLUKED6B-

BUyWEfAKZG4K9GDp_ueTF8kqqwpVpgYgTeJFvkMC46r_fPgShl_-

Xth35MODCZibOAEzG9bJ2J9Eb7s41ulFsuPcAcH78BY!/dl4/d5/L2dJQSEvUUt3QS80SmtFL1o2X0JTODhBQjFBME80MTcwQUVJ QlI4QlIwRzM2/?WCM_GLOBAL_CONTEXT=/wps/wcm/connect/place_es/contenido+site/faq/de+interes+general/faqig-



0000060]. Accessed 19 December 2020

4.2.2 Stockpiling for emergencies

4.2.2a

Does the country have a stockpile of medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) for national use during a public health emergency?

Yes = 2, Yes, but there is limited evidence about what the stockpile contains = 1, No = 0

Current Year Score: 2

Spain has stockpiles of medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) for national use during a public health emergency. The Ministry of Health is required to maintain a strategic stockpile of medical supplies and countermeasures for emergencies and catastrophes, as established by Article 126(c) of Legislative Decree 1/2015 on the Rational Use of Medicines and Health Products. [1] In the Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19) published in July 2020, the Ministry of Health outlines the importance of the National Strategical Medical Stockpile and lists several categories of products held to help fight Covid-19, such as Personal Protective Equipment (PPE), Diagnostic Tests, Medicines or Ventilators. [2] Resoultion 1254, from 22 August 2019, on "The agreement between the Ministry of Defense and the National Medicines Agency to maintain a stockpile of medicines" lists the size of medicines to be used in medical emergencies, such as 5 million doses of anviral drug Tamiflu or 2 million doses of the smallpox vaccine. [3] In addition, in 2015, Spain established the Pharmaceutical Military-Defence Centre (Centro Militar de Farmacia de la Defensa) which includes stockpiles of medicines such as Oseltamir phosphate, aspirin, flu vaccine, medication for Ebola and Marburg disease, among others. [4].

[1] Official Bulletin (Boletín Oficial). 24 July 2015. "Legislative decree approving the text of the Law on the guaranteed and rational use of medicines and health products" ("Real Decreto Legislativo 1/2015, de 24 de julio, por el que se aprueba el texto refundido de la Ley de garantías y uso racional de los medicamentos y productos sanitarios").

[https://www.boe.es/diario_boe/txt.php?id=BOE-A-2015-8343]. Accessed 19 December 2020.

[2] Ministry of Health (Ministerio de Salud). 2020. "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)".

[https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/13.07130720131534059.pdf]. Accessed 19 December 2020 [3] Official Bulletin (Boletín Oficial). 2019. "Resolution 1254 of August 22, 2019, of the Undersecretariat, which publishes the Agreement between the Ministry of Defense and the Spanish Agency for Medicines and Health Products, for the custody and management of the strategic state deposit of medicines and health products for emergencies and catastrophes (Resolución de 22 de agosto de 2019, de la Subsecretaría, por la que se publica el Convenio entre el Ministerio de Defensa y la Agencia Española de Medicamentos y Productos Sanitarios, para la custodia y gestión del depósito estatal estratégico de medicamentos y productos sanitarios para emergencias y catástrofes)". [https://www.boe.es/diario_boe/txt.php?id=BOE-A-2019-12545]. Accessed 19 December 2020.

[4] El Mundo. 16 November 2018. "The military's secret arsenal against pandemics, biological attacks and evasion of nuclear attacks") ("El arsenal secreto del Ejército español contra pandemias, ataques biológicos o escapes nucleares").
 [https://www.elmundo.es/ciencia-y-salud/salud/2018/11/16/5bedc98b468aeb261d8b4663.html]. Accessed 19 December 2020

4.2.2b

Does the country have a stockpile of laboratory supplies (e.g. reagents, media) for national use during a public health emergency?



Yes = 2, Yes, but there is limited evidence about what the stockpile contains = 1, No = 0 Current Year Score: 0

There is insufficient evidence that Spain has stockpiles of laboratory supplies for use during a public health emergency. The Ministry of Health is required to maintain a strategic stockpiles of medical supplies for emergencies and catastrophes, as established by Article 126(c) of Legislative Decree 1/2015 on the Rational Use of Medicines and Health Products. [1] In the Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19) published in July 2020, the Ministry of Health oultlines the importance of the National Strategical Medical Stockpile and lists several categories of products held to help fights Covid-19, such as diagnostic reagents and test kits but does not mention if a stockpile is maintained. During the Covid-19 pandemic, the government estimated that the reserve would hold reagents for 750,000 PCR tests, enough to cover 15 days of Covid-19 tests to the Spanish population. [2]

[1] Official Bulletin (Boletín Oficial). 24 July 2015. "Legislative decree approving the text of the Law on the guaranteed and rational use of medicines and health products" ("Real Decreto Legislativo 1/2015, de 24 de julio, por el que se aprueba el texto refundido de la Ley de garantías y uso racional de los medicamentos y productos sanitarios").

[https://www.boe.es/diario_boe/txt.php?id=BOE-A-2015-8343]. Accessed 19 December 2020.

[2] Ministry of Health (Ministerio de Salud). 2020. "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)".

[https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/13.07130720131534059.pdf]. Accessed 19 December 2020

4.2.2c

Is there evidence that the country conducts or requires an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency? Yes = 1, No = 0

es = 1, no = 0

Current Year Score: 0

There is insufficient evidence that Spain conducts an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency. There is, however, evidence that the stockpile is monitored for inventory sufficiency. The Ministry of Health is required to maintain a strategic stockpiles of medical supplies for emergencies and catastrophes, as established by Article 126(c) of Legislative Decree 1/2015 on the Rational Use of Medicines and Health Products. [1] Resolution 1254, from 22 August 2019, on "The agreement between the Ministry of Defense's Pharmacy Military Centre and the National Medicines Agency to maintain a stockpile of medicines" lists the size of medicines to be used in medical emergencies, and requires the Pharmacy Military Centre to conduct an monthly report on the size of the stockpile, which needs to be reported to the National Medicines Agency. [2] Additionally, in the Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19) published in July 2020, the Ministry of Health also provided information on the size and duration of the stockpile for the COVID-19 pandemic, covering reagents, laboratoyry tests, medicines, etc. [3] No further evidence is available via the Ministry of Health, the Ministry of Health's Emergency Operations Centre, or Defence. [4,5,6]

[1] Official Bulletin (Boletín Oficial). 2015. "Legislative decree approving the text of the Law on the guaranteed and rational use of medicines and health products" ("Real Decreto Legislativo 1/2015, de 24 de julio, por el que se aprueba el texto refundido de la Ley de garantías y uso racional de los medicamentos y productos sanitarios"). [https://www.boe.es/diario_boe/txt.php?id=BOE-A-2015-8343]. Accessed 28 May 2021.

[2] Official Bulletin (Boletín Oficial). 2019. "Resolution of August 22, 2019, of the Undersecretariat, which publishes the Agreement between the Ministry of Defense and the Spanish Agency for Medicines and Health Products, for the custody and management of the strategic state deposit of medicines and health products for emergencies and catastrophes (Resolución

de 22 de agosto de 2019, de la Subsecretaría, por la que se publica el Convenio entre el Ministerio de Defensa y la Agencia Española de Medicamentos y Productos Sanitarios, para la custodia y gestión del depósito estatal estratégico de medicamentos y productos sanitarios para emergencias y catástrofes)". [https://www.boe.es/diario_boe/txt.php?id=BOE-A-2019-12545]. Accessed 28 May 2021.

[3] Ministry of Health (Ministerio de Salud). 2020. "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)".

[https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/13.07130720131534059.pdf]. Accessed 28 May 2021.

[4] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social).

[https://www.mscbs.gob.es/en/]. Accessed 22 June 2021.

[5] Ministry of Defence (Ministerio de Defensa). [www.dsn.gob.es]. Accessed 22 June 2021.

[6] Ministry of Health, Coordination Center for Health Alerts and Emergencies (CCAES).

[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/home.htm]. Accessed 22 June 2021.

4.2.3 Manufacturing and procurement for emergencies

4.2.3a

Does the country meet one of the following criteria?

- Is there evidence of a plan/agreement to leverage domestic manufacturing capacity to produce medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) for national use during a public health emergency?

- Is there evidence of a plan/mechanism to procure medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) for national use during a public health emergency?

Needs to meet at least one of the criteria to be scored a 1 on this measure., Yes for both = 1, Yes for one = 1, No for both = 0 Current Year Score: 1

There is evidence of a plan/agreement to leverage domestic manufacturing capacity to produce medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) for national use during a public health emergency. The Ministry of Defense Order 8/2014, requesting the establishment of the Pharmacy of Defense, gives power to the Defense Military Pharmacy Centre (Centro Militar de Farmacia de la Defensa) to manufacture medical supplies and countermeasures to fight against potential health emergencies. [1] In April 2020, the Chief of Defense Staff announced an expansion of the production of medicines (such as paracetamol, wide spectrum antiviral agents) and protective equipment (such as masks) at the Defense Military Pharmacy Centre to help fight the COVID-19 pandemic. [2,3] Regarding the procurement of medical supplies and countermeasures, Spain is a member of the EU Joint Procurement Agreement to procure medical countermeasures for use during a public health emergency which includes medical supplies. [4] EU documentation on Public Health explicitly outlines the "Joint Procurement Agreement for medical equipment enables the joint purchase of vital medical supplies (such as vaccines, medicines for intensive care units) and equipment [..] where the European Commission has a coordinating role, while the EU countries purchase the items [...] including gloves, face masks, goggles, etc." [5] Additionally, by order SND/267/2020, in March 2020 the Ministry of Health set-up a process for the regional authorities to request personal protective equipment, which would help in the government in quantifying the total national needs to secure additional supplies. [6] During Spring and Summer of 2020 the government expanded the procurement of PPEs (e.g.: an additional 130 million masks) in order to provide the regions with the required materials. [7] In July 2020, in the Ministry of Health "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19) there are accounts of substantial procurement of personal protective equipment to distribute across the Spanish Regions. [8]

[1] Defense Official Bulletin (Boletín Oficial de Defensa). 2014. "Ministerial Order 8/2014, of January 30, "Official Defense Gazette" number 25, of February 6, The pharmacy request of the Ministry of Defense is established. (Orden Ministerial

8/2014, de 30 de enero, «Boletín Oficial de Defensa» número 25, de 6 de febrero, se establece el petitorio de farmacia del Ministerio de Defensa)".

[https://publicaciones.defensa.gob.es/media/downloadable/files/links/P/D/PDF569.pdf]. Accessed 22 December 2020 [2] Defense Ministry (Ministro de la Defensa). 2020. "Support from the Defense Pharmacy Military Center to 'Operation Balmis' (Apoyo del Centro Militar de Farmacia de la Defensa a la 'Operación Balmis')".

[https://www.defensa.gob.es/comun/slider/2020/04/220420-apoyo-cemilfardef-balmis.html]. Accessed 22 December 2020 [3] La Vanguardia. 2020. "The military pharmacy expands production to guarantee protective products (La farmacia militar amplía producción para garantizar productos de protección)".

[https://www.lavanguardia.com/politica/20200411/48418696844/la-farmacia-militar-amplia-produccion-para-garantizar-productos-de-proteccion.html]. Accessed 22 December 2020

[4] European Commission. "Joint procurement of medical countermeasures".

[https://ec.europa.eu/health/preparedness_response/joint_procurement_en]. Accessed 22 December 2020

[5] European Commission. "Coronavirus response - Public Health". [https://ec.europa.eu/info/live-work-travel-

eu/coronavirus-response/public-health_en]. Accessed 22 December 2020

[6] Official Bulletin (Boletín Oficial). 2020. "Order SND/267/2020, on the adoption of provisions and containment measures and submission of information to the Ministry of Health in the face of the health crisis caused by COVID-19. (Orden SND/267/2020, sobre adopción de disposiciones y medidas de contención y remisión de información al Ministerio de Sanidad ante la situación de crisis sanitaria ocasionada por el COVID-19)". [https://www.boe.es/eli/es/o/2020/03/20/snd267]. Accessed 22 December 2020

[7] Spanish Government (Gobierno de Espana). 2020. "The Government distributes more than 9.3 million masks to reinforce the purchase of the autonomous communities and facilitate their reservation (El Gobierno distribuye más de 9,3 millones de mascarillas para reforzar la compra de las comunidades autónomas y facilitar su reserva)".

[https://www.lamoncloa.gob.es/serviciosdeprensa/notasprensa/sanidad14/Paginas/2020/080620-mascarillas.aspx]. Accessed 22 December 2020

[8] Ministry of Health (Ministerio de Salud). 2020. "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)".

[https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/13.07130720131534059.pdf]. Accessed 14 December 2020

4.2.3b

Does the country meet one of the following criteria?

- Is there evidence of a plan/agreement to leverage domestic manufacturing capacity to produce laboratory supplies (e.g. reagents, media) for national use during a public health emergency?

- Is there evidence of a plan/mechanism to procure laboratory supplies (e.g. reagents, media) for national use during a public health emergency?

Needs to meet at least one of the criteria to be scored a 1 on this measure., Yes for both = 1, Yes for one = 1, No for both = 0 Current Year Score: 0

There is insufficeint evidence that Spain has a mechanism to produce or procure laboratory supplies (e.g. reagents, media) for national use during a public health emergency.

The Ministry of Defense Order 8/2014, requesting the establishment of the Pharmacy of Defense, gives power to the Defense Military Pharmacy Centre (Centro Militar de Farmacia de la Defensa) to manufacture medical supplies to fight against potential health emergencies, however there is no evidence of production for laboratory supplies. [1] In the Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19) published in July 2020, the Ministry of Health oultlines the importance of holding a reserve of diagnostic reagents and test kits, however there is no evidence of national manufacturing capacity for these products. [2] Spain is a member of the EU

Joint Procurement Agreement to procure medical countermeasures for use during a public health emergency. [3] EU documentation on Public Health, outline: "The voluntary Joint Procurement Agreement for medical equipment enables the joint purchase of vital medical supplies and equipment. [...] Framework contracts following the first four joint procurement procedures have been signed and EU countries can place orders for laboratory equipment (kits, reagents, swabs, and laboratory consumables". [4]

[1] Defense Official Bulletin (Boletín Oficial de Defensa). 2014. "Ministerial Order 8/2014, of January 30, "Official Defense Gazette" number 25, of February 6, The pharmacy request of the Ministry of Defense is established. (Orden Ministerial 8/2014, de 30 de enero, «Boletín Oficial de Defensa» número 25, de 6 de febrero, se establece el petitorio de farmacia del Ministerio de Defensa)".

[https://publicaciones.defensa.gob.es/media/downloadable/files/links/P/D/PDF569.pdf]. Accessed 22 December 2020 [2] Ministry of Health (Ministerio de Salud). 2020. "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)".

[https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/13.07130720131534059.pdf]. Accessed 19 December 2020 [3] European Commission. "Joint procurement of medical countermeasures".

[https://ec.europa.eu/health/preparedness_response/joint_procurement_en]. Accessed 22 December 2020 [4] European Commission. "Coronavirus response - Public Health". [https://ec.europa.eu/info/live-work-traveleu/coronavirus-response/public-health_en]. Accessed 22 December 2020

4.3 MEDICAL COUNTERMEASURES AND PERSONNEL DEPLOYMENT

4.3.1 System for dispensing medical countermeasures (MCM) during a public health emergency

4.3.1a

Does the country have a plan, program, or guidelines in place for dispensing medical countermeasures (MCM) for national use during a public health emergency (i.e., antibiotics, vaccines, therapeutics and diagnostics)?

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Spain has a plan, program or guidelines in place for dispensing medical countermeasures for national use during a public health emergency. There is evidence on dispensing guidelines for specific diseases such as COVID-19 or the flu vaccine, in particular, but no general health emergency plan. Spain's COVID-19 Vaccination plan outlines several tiers for vaccine administration based on risk factors such as age and co-morbidities; whilst the "Flu Pandemic Plan" (Plan de pandemia de gripe) specifies the existence of distribution channels for antivirals and flu vaccines down to the local level. [1,2,3] Given the nature of the Pharmaceutical Military-Defence Centre (Centro Militar de Farmacia de la Defensa), the existence of plans, guidelines or programs, if held by the Ministry of Defence and not the Ministry of Health, may not be disclosed publicly [4,5].

 [1] Ministry of Health (Ministerio de Sanidad). 2020. "COVID-19 Spanish Vaccination Strategy (Estrategia de Vacunacion COVID-19 en Espana)". [https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/24.11241120144431769.pdf]. Accessed
 19 December 2020

[2] Ministry of Health (Ministerio de Salud). 2020. "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)".

[https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/13.07130720131534059.pdf]. Accessed 19 December 2020 [3] Ministry of Health (Ministerio de Sanidad). 2005. "Flu pandemic plan" (Plan de pandemia de gripe)".



[http://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/pandemia/home.htm]. Accessed 19 December 2020 [4] Social Science & Medicine. 2015. Vol. 131. Stefan Elbe et al. "Medical countermeasures for national security: A new government role in the pharmaceuticalization of society". [https://ac.els-cdn.com/S0277953614002664/1-s2.0-S0277953614002664-main.pdf?_tid=83e25992-c051-4871-afa8-

f868e7932e71&acdnat=1544207579_d9d11f61c6c919f954e06b5a7cd8a649]. Accessed 19 December 2020 [5] Ministry of Health. 2018. "Stockpile situation of oseltamivir and related medications, acquired within the preparatory plans for a flu pandemic (Situación del stock de oseltamivir y medicamentos relacionados, adquiridos dentro del plan de preparación de la pandemia de gripe)".

[https://www.aemps.gob.es/informa/notasInformativas/medicamentosUsoHumano/2018/NI-MUH_9-2018-Oseltamivir.htm]. Accessed 19 December 2020

4.3.2 System for receiving foreign health personnel during a public health emergency

4.3.2a

Is there a public plan in place to receive health personnel from other countries to respond to a public health emergency? Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Spain has in place a plan to receive health personnel from other countries in case of public health emergencies. There is no information as to the existence of a formal plan for receiving health personnel from other countries in case of public health emergencies neither from the Ministry of Health, the Ministry of Health's' Emergency Operations Centre or Defence. [1,2,3] While as a Member of the European Union, Spain can request advice and assistance from other Member States during a public health emergency, including the request for additional staff from other countries, there is no evidence on the website of the Ministry of Health, the Ministry of Health's Emergency Operations Centre, or Defence that it has implemented a procedure to receive personnel, such as transportation, distribution to respond, visas, among other issues [1,2,3,4,5].

[1] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social).
[https://www.mscbs.gob.es/en/]. Accessed 19 December 2020
[2] Ministry of Defence (Ministerio de Defensa). [www.dsn.gob.es]. Accessed 19 December 2020
[3] Ministry of Health, Coordination Center for Health Alerts and Emergencies (CCAES).
[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/home.htm]. Accessed 19 December 2020
[4] European Centre for Disease Control and Prevention (ECDC). 2017. "Public Health Emergency Preparedness Core Competencies EU Member States". [https://ecdc.europa.eu/sites/portal/files/documents/public-health-emergency-preparedness-core-competencies-eu-member-states.pdf]. Accessed 19 December 2020
[5] European Commission. "EU Civil Protection Mechanism." [http://ec.europa.eu/echo/what/civil-protection/mechanism en]. Accessed 19 December 2020

4.4 HEALTHCARE ACCESS

4.4.1 Access to healthcare

4.4.1a

Does the constitution explicitly guarantee citizens' right to medical care?



Guaranteed free = 4, Guaranteed right = 3, Aspirational or subject to progressive realization = 2, Guaranteed for some groups, not universally = 1, No specific provision = 0

Current Year Score: 3

2020

World Policy Analysis Center

4.4.1b

Access to skilled birth attendants (% of population) Input number Current Year Score: 99.15

1999-2018

WHO/World Bank/United Nations Children's Fund (UNICEF)

4.4.1c

Out-of-pocket health expenditures per capita, purchasing power parity (PPP; current international \$) Input number

Current Year Score: 817.42

2017

WHO Global Health Expenditure database

4.4.2 Paid medical leave

4.4.2a

Are workers guaranteed paid sick leave? Paid sick leave = 2, Unpaid sick leave = 1, No sick leave = 0 Current Year Score: 2

2020

World Policy Analysis Center

4.4.3 Healthcare worker access to healthcare

4.4.3a

Has the government issued legislation, a policy, or a public statement committing to provide prioritized healthcare services to healthcare workers who become sick as a result of responding to a public health emergency? Yes = 1, No = 0



Current Year Score: 0

There is no publicly available evidence that Spain provides prioritized health care services to healthcare workers who become sick as a result of responding to a public health emergency. Spain's COVID-19 Vaccination plan outlines several tiers for vaccine administration and health workers have been prioritized and are expected to be innoculated in the first wave, however this does not mean they will receive prioritized care if they fall sick [1] The Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19) published in July 2020 outlines a compehensive range of measures to prevent and fight COVID-19 does not have any explicit measures to prioritize care for health workers. [2]. Spain's national emergency response plans (Sistema de Alerta Precoz y Respuesta Rapida) [3], and the emergency response plan for a flu pandemic have no mention of prioritized health care for healthcare workers [4] and there is no additional information on the subject on the website of the Ministry of Health [5].

 [1] Ministry of Health (Ministerio de Sanidad). 2020. "COVID-19 Spanish Vaccination Strategy (Estrategia de Vacunacion COVID-19 en Espana)". [https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/24.11241120144431769.pdf]. Accessed
 19 December 2020

[2] Ministry of Health (Ministerio de Salud). 2020. "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)".

[https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/13.07130720131534059.pdf]. Accessed 19 December 2020 [3] Ministry of Health (Ministerio de Sanidad). 2013. "Early Warning and Rapid Response System (Sistema de Alerta Precoz y Respuesta Rapida)". [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/SIARP/Msssi_SIAPR_21032013.pdf]. Accessed 19 December 2020

[4] Ministry of Health (Ministerio de Sanidad). 2005. "National Influenza Pandemic Preparedness and Response Plan (Plan nacional de preparación y respuesta ante una pandemia de gripe)".

[https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/docs/PlanGripeEspanol.pdf]. Accessed 19 December 2020

[5] Ministry of Health (Ministerio de Sanidad). [https://www.mscbs.gob.es/en/]. Accessed 19 December 2020

4.5 COMMUNICATIONS WITH HEALTHCARE WORKERS DURING A PUBLIC HEALTH EMERGENCY

4.5.1 Communication with healthcare workers

4.5.1a

Is there a system in place for public health officials and healthcare workers to communicate during a public health emergency?

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that Spain has a system in place for public health officials and healthcare workers to communicate during a public health emergency.

In Spain, the Early Warning and Rapid Response System (Sistema de Alerta Precoz y Respuesta Rapida, SIAPR) is a permanent, 24/7 communication system for all "important public health events of national or international importance", and was created for the rapid detection of public health threats and emergencies and to coordinate the response to those threats and emergencies. The system stipulates that each autonomous community is responsible for its own local emergency management document, recomending a communications protocol between local public health officials and healthcare
workers [1,2]. As an example, in the Autonomous Community of Madrid, a communications strategy was adopted, whereby each health area (e.g.: hospital) assigns one person to manage communications with public health officials [3]. While there are no more recent plans or strategies to confirm this, the sources consulted are the most current versions of existing plans and are still in effect.

[1] Ministry of Health (Ministro de Sanidad). 2013. "Early Warning and Rapid Response System (Sistema de Alerta Precoz y Respuesta Rapida)". [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/SIARP/Msssi_SIAPR_21032013.pdf]. Accessed 19 December 2020

[2] Ministry of Health (Ministro de Sanidad). 2005. "National Influenza Pandemic Preparedness and Response Plan" (Plan nacional de preparación y respuesta ante una pandemia de gripe)".

[https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/docs/PlanGripeEspanol.pdf]. Accessed 19 December 2020

[3] Community of Madrid. 2009. "Preparatory and response plan for a flu pandemic in the community of Madrid" (Plan de preparación y respuesta ante una pandemia de gripe de la Comunidad de Madrid)".

[https://www.researchgate.net/profile/Vicente_Sanchez-

Brunete/publication/319270442_Plan_de_Preparacion_y_Respuesta_ante_una_Pandemia_de_Gripe_de_la_Comunidad_de _Madrid/links/599f45e30f7e9b3639fe223a/Plan-de-Preparacion-y-Respuesta-ante-una-Pandemia-de-Gripe-de-la-Comunidad-de-Madrid.pdf]. Accessed 19 December 2020

4.5.1b

Does the system for public health officials and healthcare workers to communicate during an emergency encompass healthcare workers in both the public and private sector?

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that Spain has a system in place for public health officials and healthcare workers to communicate during a public health emergency. Hence, there is no evidence that it is inclusive of both the public and private sectors.

In Spain, the Early Warning and Rapid Response System (Sistema de Alerta Precoz y Respuesta Rapida, SIAPR) is a permanent, 24/7 communication system for all "important public health events of national or international importance", and was created for the rapid detection of public health threats and emergencies and to coordinate the response to those threats and emergencies. The system stipulates that each autonomous community is responsible for its own local emergency management document, recomending a communications protocol between local public health officials and healthcare workers [1,2]. As an example, in the Autonomous Community of Madrid, a communications strategy was adopted, whereby each health area (e.g.: hospital) assigns one person to manage communications with public health officials [3]. While there are no more recent plans or strategies to confirm this, the sources consulted are the most current versions of existing plans and are still in effect.

[1] Ministry of Health (Ministro de Sanidad). 2013. "Early Warning and Rapid Response System (Sistema de Alerta Precoz y Respuesta Rapida)". [https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/SIARP/Msssi_SIAPR_21032013.pdf]. Accessed 19 December 2020

[2] Ministry of Health (Ministro de Sanidad). 2005. "National Influenza Pandemic Preparedness and Response Plan" (Plan nacional de preparación y respuesta ante una pandemia de gripe)".

[https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/docs/PlanGripeEspanol.pdf]. Accessed 19 December 2020



[3] Community of Madrid. 2009. "Preparatory and response plan for a flu pandemic in the community of Madrid" (Plan de preparación y respuesta ante una pandemia de gripe de la Comunidad de Madrid)". [https://www.researchgate.net/profile/Vicente Sanchez-

Brunete/publication/319270442_Plan_de_Preparacion_y_Respuesta_ante_una_Pandemia_de_Gripe_de_la_Comunidad_de _Madrid/links/599f45e30f7e9b3639fe223a/Plan-de-Preparacion-y-Respuesta-ante-una-Pandemia-de-Gripe-de-la-Comunidad-de-Madrid.pdf]. Accessed 19 December 2020

4.6 INFECTION CONTROL PRACTICES AND AVAILABILITY OF EQUIPMENT

4.6.1 Healthcare associated infection (HCAI) prevention and control programs

4.6.1a

Is there evidence that the national public health system is monitoring for and tracking the number of healthcare associated infections (HCAI) that take place in healthcare facilities?

Yes = 1 , No = 0

Current Year Score: 1

There is publicly available evidence that Spain's health system monitors for and tracks health care associated infections (HCAI) contracted in healthcare facilities. In 2020, during the COVID-19 pandemic, the government monitored the number of healthcare workers infected with the new coronavirus, and published the number of cases in the daily brief. [1] In line with the European Commission's recommendation 2009/C151/O1 on surveillance of HCAI and Norm A179006, Spain issued a Surveillance Protocol on HCAIs (Protocolo de Vigilancia de Brotes de IRAs). [2] In response, in 2013 Spain began working on a national HCAI surveillance system to ensure a standardized methodology for data collection across the country, which had previously been collected according to different local laws in each Autonomous Community. The national HCAI surveillance system was launched in January 2018 [3], whereby each hospital (at the local level) and each Autonomous Community (at the regional level) is responsible for reporting incidents of HCAIs to the National Centre of Epidemiology (Centro Nacional de Epidemiología) via the National Surveillance Network of Epidemiology (RENAVE). [2,3] Spain has been a member of the European Hospitals in Europe Link for Infection Control Through Surveillance (HELIC) network since 2000 and of the Healthcare-Associated Infections Surveillance Network (HAI-Net) since 2008. [3]

 [1] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). 2020. "Daily Covid-19 Report. Update 274 from 18th December 2020 (Situacion Covid-19. Fecha de informe: 18 Diciembre 2020)[https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov/documentos/Actualizacion_274_CO VID-19.pdf]. Accessed 19 December 2020

[2] Carlos III Health Institute - National Surveillance System for healthcare related infections (Instituto de Salud Carlos III - Sistema Nacional de Vigilancia de las Infecciones relacionadas con la asistencia sanitaria). 2019. "Surveillance Protocol on HCAIs (Protocolo de Vigilancia de Brotes de IRAS)".

[https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/EnfermedadesTransmisibles/Documents/PROT OCOLOS/PROTOCOLOS%20EN%20BLOQUE/PROTOCOLOS%20IRAS%20Y%20RESISTENCIAS/PROTOCOLOS%20NUEVOS%2020 19%20IRAS/Protocolo-BROTES_Nov2017_rev_Abril2019.pdf]. Accessed 19 December 2020

[3] Carlos III Health Institute, National Epidemiology Center (Instituto de Salud Carlos III, Centro Nacional de Epidemiología). 2018. "National system on HCAI surveillance (Sistema nacional de vigilancia de las infecciones relacionadas con la asistencia sanitaria)".

[https://gobierno.aragon.es/estaticos/GobiernoAragon/Departamentos/SanidadBienestarSocialFamilia/Sanidad/Canales/IRAS



PROA/Documentos/Taller_IRAS4.pdf]. Accessed 19 December 2020

4.7 CAPACITY TO TEST AND APPROVE NEW MEDICAL COUNTERMEASURES

4.7.1 Regulatory process for conducting clinical trials of unregistered interventions

4.7.1a

Is there a national requirement for ethical review (e.g., from an ethics committee or via Institutional Review Board approval) before beginning a clinical trial?

Yes = 1 , No = 0

Current Year Score: 1

There is a national requirement for ethical review before beginning a clinical trial in Spain. By law, clinical trials in Spain require review by an ethics committee, as mandated by Decree 1090/2015, which incorporates the European Union's Clinical Trials Regulation No. 536/2014 into Spanish law, establishing the sharing of responsibilities and collaboration between the Spanish Agency of Medicine and Health Products (Agencia Española del Medicamento y Productos Sanitarios, AEMPS) and the Ethics Committee (Comité ético de Investigación con Medicamentos, CEIM) for all clinical trials in the country. [1]

1. Official Bulletin. 2015. "Decree 1090/2015 regulating clinical trials with medicinal products, Ethics Committees for Investigation with medicinal products and the Spanish Clinical Studies Registry" ("Real Decreto 1090/2015 por el que se regulan los ensayos clínicos con medicamentos, los Comités de Ética de la Investigación con medicamentos y el Registro Español de Estudios Clínicos.") [https://www.boe.es/buscar/doc.php?id=BOE-A-2015-14082] Accessed 19 December 2020

4.7.1b

Is there an expedited process for approving clinical trials for unregistered medical countermeasures (MCM) to treat ongoing epidemics?

Yes = 1 , No = 0

Current Year Score: 1

Spain has an expedited process for approving clinical trials in the case of urgent need. Spain's Decree 1090/2015 Article 7 details the expedited approval process, including express approval by the Ethics Committee (Comité ético de Investigación con Medicamentos, CEIM). Although pandemics are not explicitly mentioned, the terminology "urgent need" would encompass all urgent public health emergencies. [1] In 2020, Spain as well as other European countries were relying on the European Medicines Agency to expedite the approval of Pfizer and Moderna's vaccines for COVID-19. [2,3]

[1] Official Bulletin (Boletín Oficial). 2015. "Decree 1090/2015 regulating clinical trials with medicinal products, Ethics Committees for Investigation with medicinal products and the Spanish Clinical Studies Registry (Real Decreto 1090/2015 por el que se regulan los ensayos clínicos con medicamentos, los Comités de Ética de la Investigación con medicamentos y el Registro Español de Estudios Clínicos)". [https://www.boe.es/buscar/doc.php?id=BOE-A-2015-14082]. Accessed 19 December 2020

 [2] Ministry of Health (Ministerio de Sanidad). 2020. "COVID-19 Spanish Vaccination Strategy (Estrategia de Vacunacion COVID-19 en Espana)". [https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/24.11241120144431769.pdf]. Accessed
 19 December 2020

[3] European Medicines Agency. 2020. "EMA receives application for conditional marketing authorisation of Moderna COVID-19 vaccine". [https://www.ema.europa.eu/en/news/ema-receives-application-conditional-marketing-authorisation-modernacovid-19-vaccine]. Accessed 19 December 2020

4.7.2 Regulatory process for approving medical countermeasures

4.7.2a

Is there a government agency responsible for approving new medical countermeasures (MCM) for humans? Yes = 1 , No = 0

Current Year Score: 1

There is a government agency responsible for approving new medical countermeasures for humans. In Spain, the Spanish Agency of Medicine and Health Products (Agencia Española del Medicamento y Productos Sanitarios, AEMPS) approves new countermeasures for humans. [1,2] In addition, in the European Union regulatory decisions on market authorisation of new medical countermeasures made by the European Medicines Agency (EMA) are normally followed on a national level (in Spain by AEMPS) through a centralised authorisation procedure. [3]

[1] Official Bulletin (Boletin Oficial). 2015. "Legislative decree approving the Law on the guaranteed and rational use of medications and health products" (Real Decreto Legislativo 1/2015 de 24 de julio por el se que aprueba el texto refundido de la Ley de garantías y uso racional de los medicamentos y productos sanitarios)".

[https://www.boe.es/diario_boe/txt.php?id=BOE-A-2015-8343]. Accessed 20 December 2020

[2] Carlos III Health Institute (Instituto de Salud Carlos III). "Research Ethics Committee" (Comité de Etica de la Investigación, CEI)". [https://www.isciii.es/QueHacemos/Servicios/ComitesEtica/CEI/Paginas/Funciones.aspx]. Accessed 20 December 2020
[3] European Medicines Agency (EMA). 2018. "What we do". [https://www.ema.europa.eu/en/about-us/what-we-do/authorisation-medicines]. Accessed 20 December 2020

4.7.2b

Is there an expedited process for approving medical countermeasures (MCM) for human use during public health emergencies?

Yes = 1 , No = 0

Current Year Score: 1

There is evidence that an expedited process exists to approve medical countermeasures for human use during a public health emergency. The Ministry of Health has the legal authority to import medical countermeasures in an expedited process if they are not authorized in Spain. Article 24 of Legislative Decree 1/2015 states that the Spanish Agency for Medicine and Health Products (Agencia Espanola de Medicamentos y Productos Sanitarios) can temporarily authorise the use of unapproved medications to prevent the "supposed or confirmed spread of a pathogenic or chemical agent, toxin or nuclear radiation capable of causing harm." [1]. There is also evidence that an ethics committee in Spain can give expedited approval for treatment during pandemics, such as the during an "Influenza A Pandemic", whereby an ethics committee in Tarragona gave expedited approval for treatment for patients hospitalised in the ICU. Ethics approval was given based on the fact that it was a public health emergency and that prior consent had been given for treatment. [2] Also, during the COVID-19 pandemic in December 2020, the European Medicines Agency expedited the approval of vaccines, which were used in Spain under the supervision of the Spanish Agency for Medicine and Health Products. [3].

[1] Official Bulletin (Boletin Oficial). 2015. "Legislative decree approving the Law on the guaranteed and rational use of medications and health products (Real Decreto Legislativo 1/2015 de 24 de julio por el se que aprueba el texto refundido de la Ley de garantías y uso racional de los medicamentos y productos sanitarios)".

[https://www.boe.es/diario_boe/txt.php?id=BOE-A-2015-8343.]. Accessed 20 December 2020

[2] Medicina Intensiva (Intensive Medicine). 2010. "Pandemic Influenza A in the ICU: Experience in Spain and Latin America GETGAG/SEMICYUC, Spanish Working Group on Severe Pandemic Influenza A" ("Gripe A pandemica en una unidad de cuidados intensivos: experiencia en Espana y Latinoamerica (Grupo Espanol de Trabajo de Gripe A Grave/Sociedad Espanola de Medicina Intensiva, Critica y Unidades Coronarias)". [http://scielo.isciii.es/pdf/medinte/v34n2/original1.pdf]. Accessed 20 December 2020

[3] Spanish Agency for Medicine and Health Products (Agencia Espanola de Medicamentos y Productos Sanitarios). 2020. "EMA receives request for conditional authorization of COVID-19 vaccines from BioNTech / Pfizer and Moderna (La EMA recibe la solicitud de autorización condicional de las vacunas contra la COVID-19 de BioNTech/Pfizer y Moderna)". [https://www.aemps.gob.es/informa/notasinformativas/laaemps/2020-laaemps/la-ema-recibe-la-solicitud-de-autorizacioncondicional-de-las-vacunas-contra-la-covid-19-de-biontech-pfizer-y-moderna/]. Accessed 20 December 2020

Category 5: Commitments to improving national capacity, financing plans to address gaps, and adhering to global norms

5.1 INTERNATIONAL HEALTH REGULATIONS (IHR) REPORTING COMPLIANCE AND DISASTER RISK REDUCTION

5.1.1 Official IHR reporting

5.1.1a

Has the country submitted IHR reports to the WHO for the previous calendar year? Yes = 1 , No = 0

Current Year Score: 1

2020

World Health Organization

5.1.2 Integration of health into disaster risk reduction

5.1.2a

Are epidemics and pandemics integrated into the national risk reduction strategy or is there a standalone national disaster risk reduction strategy for epidemics and pandemics?

Yes = 1 , No = 0

Current Year Score: 1

Pandemics and other public health emergencies are incorporated into Spain's national risk reduction strategy. The 2017 National Security Strategy (Estrategia de Seguridad Nacional) names epidemics and pandemics as one of the 15 key action areas in its risk reduction strategy. The National Security Strategy specifies a series of target capacity improvements and response mechanisms to reduce risks from epidemics and pandemics, which include: i) adapting the country's dedicated hospital network capable of treating confirmed Ebola cases to be able to respond to all high risk infectious diseases, ii) revising and periodically updating existing individual risk-specific preparation and response plans, iii) expanding the reach of the surveillance and control systems on exotic and atochthonous vectors, as well as expanding the National Preparation and Response Plan for Vector-Transmitted Diseases to include all vectors of interest, among others. Generally, the National Security Strategy calls for the creation of a series of national and sub-national preparation and response plans to reduce risks from pandemics, both universal and disease-specific. [1,2] The 2019 Civil Protection National Strategy (Estrategia Nacional de Proteccion Civil) also identifies a series of Risks, however it is more focused on Natural Disasters (such as floods, wildfires, or nuclear disasters), and does not include risk reduction for epidemics or pandemics. [3]

[1] Official Bulletin. 2017. "Decree 1008/2017 approving the National Security Strategy 2017 (Real Decreto 1008/2017, de 1 de diciembre, por el que se aprueba la Estrategia de Seguridad Nacional 2017)".

[https://www.boe.es/buscar/act.php?id=BOE-A-2017-15181]. Accessed 20 December 2020

[2] Department of National Security (Departamento de Seguridad Nacional). 2020. "Annual National Security Report 2019" ("Informe Anual de Seguridad Nacional 2019)". [https://www.dsn.gob.es/es/documento/informe-anual-seguridad-nacional-2019]. Accessed 20 December 2020

[3] Spanish Government (Gobierno de Espana). 2019. "Civil Protection National Strategy (Estrategia Nacional de Proteccion Civil)". [http://www.proteccioncivil.es/documents/20486/156645/EstrategiaNacionaProtecci%C3%B3nCivil.pdf/00f903b0-41b3-4071-9469-07e14e92513e]. Accessed 20 December 2020

5.2 CROSS-BORDER AGREEMENTS ON PUBLIC HEALTH AND ANIMAL HEALTH EMERGENCY RESPONSE

5.2.1 Cross-border agreements

5.2.1a

Does the country have cross-border agreements, protocols, or MOUs with neighboring countries, or as part of a regional group, with regards to public health emergencies?

Yes = 2, Yes, but there is evidence of gaps in implementation = 1, No = 0

Current Year Score: 2

Spain has cross-border agreements and laws with neighbouring countries with regards to public health emergencies. Spain is part of the EU, therefore it is also a member of the European Centre for Disease Prevention and Control (ECDC) which establishes cross-border agreements with regards to public health emergencies with other EU countries. According to the ECDC, "Decision No 1082/2013/EU of the European Parliament and the Council of 22 October 2013 on serious cross-border threats to health calls on all EU Member States to further develop, strengthen and maintain their capacities to monitor, identify (early warning and assessment) and respond to serious cross-border health threats." [1] This indicates that the EU member states will support each other in health emergency response to prevent a pandemic to spread across and throughout countries. The ECDC provides the platform for the coordination of measures and response to serious cross-border threats to health, supports the exchange of information between countries and coordinates in liaison with the Commission their preparedness, planning, risk and crisis communication and responses. [1,2] During the COVID-19 pandemic in 2020 there were several examples of colaboration on health matters across EU countries, such as common procurement



of medical countermeasures or protective equipment, information sharing or common vaccination strategy. [3]

[1] European Centre for Disease Prevention and Control. "ECDC activities on preparedness".

[https://ecdc.europa.eu/en/about-uswhat-we-do/ecdc-activities-preparedness]. Accessed 20 December 2020 [2] European Commission. 2018. "Communicable diseases".

[https://ec.europa.eu/health/communicable_diseases/overview_en?2nd-language=mt]. Accessed 20 December 2020 [3] European Commission. 2020. "Coronavirus Response - Public Health". [https://ec.europa.eu/info/live-work-traveleu/coronavirus-response/public-health_en]. Accessed 20 December 2020

5.2.1b

Does the country have cross-border agreements, protocols, or MOUs with neighboring countries, or as part of a regional group, with regards to animal health emergencies?

Yes = 2, Yes, but there is evidence of gaps in implementation = 1, No = 0

Current Year Score: 2

Spain has in place cross-border agreements and laws as part of a regional group with regards to animal health emergencies. Spain is part of the EU, therefore it is also a member of the European Centre for Disease Prevention and Control (ECDC) which establishes cross-border agreements with regards to public health emergencies with other EU countries including those involving animal health, such as the European Food- and Waterborne Diseases and Zoonoses Network. [1,2] The European Union has also set-up the Union Rapid Response network on animal health and diseases, which includes veterinary authorities in member states, private veterinarians, farmers and agricultural professionals. The network coordinates EU-wide action to contain disease outbreaks among livestock and animal products. The 2012 report on "Evaluation of the EU rapid response network, crisis management and communication capacity regarding certain transmissible animal diseases", outlines the purpose of the Rapid Response Network on Animal Health "to coordinate action in order to define and implement appropriate measures to effectively and efficiently address animal disease outbreaks, so as to safeguard public and animal health and minimise detrimental trade effects" [3].

[1] European Centre for Disease Prevention and Control. "European Food- and Waterborne Diseases and Zoonoses Network". [https://www.ecdc.europa.eu/en/about-us/procurement-and-grants/review-and-evaluation-public-health-and-animal-health-aspects-west]. Accessed 20 December 2020

[2] European Centre for Disease Prevention and Control. "Zoonoses". [https://www.ecdc.europa.eu/en/zoonoses]. Accessed 20 December 2020

[3] European Commission Directorate General for Health and Consumers. 2012. "Evaluation of the EU rapid response network, crisis management and communication capacity regarding certain transmissible animal diseases".

[https://ec.europa.eu/food/sites/food/files/animals/docs/ah_policy_eval_eu-rapid-response_20120801.pdf]. Accessed 20 December 2020

[4] EU Monitor. 2010. "EU Member States' cooperation projects on animal health with third countries".

[https://www.eumonitor.nl/9353000/1/j9vvik7m1c3gyxp/vj6ipmir6pya]. Accessed 20 December 2020

[5] European Centre for Disease Prevention and Control. "Brucellosis". [https://www.ecdc.europa.eu/en/brucellosis]. Accessed 20 December 2020



5.3 INTERNATIONAL COMMITMENTS

5.3.1 Participation in international agreements

5.3.1a

Does the county have signatory and ratification (or same legal effect) status to the Biological Weapons Convention?

Signed and ratified (or action having the same legal effect) = 2, Signed = 1, Non-compliant or not a member = 0 Current Year Score: 2

2021

Biological Weapons Convention

5.3.1b

Has the country submitted confidence building measures for the Biological Weapons Convention in the past three years? Yes = 1, No = 0

Current Year Score: 1

2021

Biological Weapons Convention

5.3.1c

Has the state provided the required United Nations Security Council Resolution (UNSCR) 1540 report to the Security Council Committee established pursuant to resolution 1540 (1540 Committee)?

Yes = 1 , No = 0

Current Year Score: 1

2021

Biological Weapons Convention

5.3.1d

Extent of United Nations Security Council Resolution (UNSCR) 1540 implementation related to legal frameworks and enforcement for countering biological weapons:

Very good (60+ points) = 4, Good (45–59 points) = 3, Moderate (30–44 points) = 2, Weak (15–29 points) = 1, Very weak (0–14 points) or no matrix exists/country is not party to the BWC = 0

Current Year Score: 4

2021

Biological Weapons Convention



5.3.2 Voluntary memberships

5.3.2a

Does the country meet at least 2 of the following criteria?

- Membership in Global Health Security Agenda (GHSA)
- Membership in the Alliance for Country Assessments for Global Health Security and IHR Implementation (JEE Alliance)
- Membership in the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction (GP)
- Membership in the Australia Group (AG)
- Membership in the Proliferation Security Initiative (PSI)

Needs to meet at least two of the criteria to be scored a 1 on this measure. , Yes for five = 1, Yes for four = 1, Yes for three = 1, Yes for two = 1, Yes for one = 0, No for all = 0

Current Year Score: 1

2021

Global Health Security Agenda; JE Alliance; Global Partnership; Australia Group; PSI

5.4 JOINT EXTERNAL EVALUATION (JEE) AND PERFORMANCE OF VETERINARY SERVICES PATHWAY (PVS)

5.4.1 Completion and publication of a Joint External Evaluation (JEE) assessment and gap analysis

5.4.1a

Has the country completed a Joint External Evaluation (JEE) or precursor external evaluation (e.g., GHSA pilot external assessment) and published a full public report in the last five years?

Yes = 1 , No = 0

Current Year Score: 0

2021

WHO Strategic Partnership for IHR and Health Security (SPH); Global Health Security Agenda

5.4.1b

Has the country completed and published, within the last five years, either a National Action Plan for Health Security (NAPHS) to address gaps identified through the Joint External Evaluation (JEE) assessment or a national GHSA roadmap that sets milestones for achieving each of the GHSA targets?

Yes = 1 , No = 0

Current Year Score: 0

2021

WHO Strategic Partnership for IHR and Health Security (SPH); Global Health Security Agenda



5.4.2 Completion and publication of a Performance of Veterinary Services (PVS) assessment and gap analysis

5.4.2a

Has the country completed and published a Performance of Veterinary Services (PVS) assessment in the last five years?

Yes = 1 , No = 0

Current Year Score: 0

2021

OIE PVS assessments

5.4.2b

Has the country completed and published a Performance of Veterinary Services (PVS) gap analysis in the last five years? Yes = 1, No = 0

Current Year Score: 0

2021

OIE PVS assessments

5.5 FINANCING

5.5.1 National financing for epidemic preparedness

5.5.1a

Is there evidence that the country has allocated national funds to improve capacity to address epidemic threats within the past three years?

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that the country has allocated national funds to improve capacity to address epidemic threats within the past three years. There is evidence the country has allocated national funds to fight existing threats, when dealing with the COVID-19 pandemic in 2020, however these efforts are not to improvide capacity for future threats. [1] Recent Emergency plans, such as the Civil Protection National Strategy (Estrategia Nacional de Proteccion Civil) published in 2019, does not mention that there is an increase in funds to improve capacity to address epidemic threats. [2] There is no evidence on the websites of the Ministry of Health or Agriculture on the subject, or in press releases and media related to the health spending. [3,4]

[1] Ministry of Health (Ministerio de Salud). 2020. "Rapid Response Plan to Control a Covid-19 Pandemic (Plan de Respuesta Temprana en un Escenario de Control de la Pandemia por Covid-19)".

[https://www.mscbs.gob.es/gabinetePrensa/notaPrensa/pdf/13.07130720131534059.pdf]. Accessed 22 December 2020 [2] Spanish Government (Gobierno de Espana). 2019. "Civil Protection National Strategy (Estrategia Nacional de Proteccion Civil)". [http://www.proteccioncivil.es/documents/20486/156645/EstrategiaNacionaProtecci%C3%B3nCivil.pdf/00f903b0-41b3-4071-9469-07e14e92513e]. Accessed 22 December 2020



[3] Ministry of Health (Ministerio de Sanidad). [https://www.mscbs.gob.es/]. Accessed 22 December 2020[4] Ministry of Agriculture (Ministerio de Agricultura). [https://www.mapa.gob.es/es/]. Accessed 22 December 2020

5.5.2 Financing under Joint External Evaluation (JEE) and Performance of Veterinary Services (PVS) reports and gap analyses

5.5.2a

Does the Joint External Evaluation (JEE) report, National Action Plan for Health Security (NAPHS), and/or national GHSA roadmap allocate or describe specific funding from the national budget (covering a time-period either in the future or within the past five years) to address the identified gaps?

Yes = 1, No/country has not conducted a JEE = 0

Current Year Score: 0

2021

WHO Strategic Partnership for IHR and Health Security (SPH); Global Health Security Agenda

5.5.2b

Does the Performance of Veterinary Services (PVS) gap analysis and/or PVS assessment allocate or describe specific funding from the national budget (covering a time-period either in the future or within the past five years) to address the identified gaps?

```
Yes = 1 , No/country has not conducted a PVS = 0
Current Year Score: 0
```

2021

OIE PVS assessments

5.5.3 Financing for emergency response

5.5.3a

Is there a publicly identified special emergency public financing mechanism and funds which the country can access in the face of a public health emergency (such as through a dedicated national reserve fund, an established agreement with the World Bank pandemic financing facility/other multilateral emergency funding mechanism, or other pathway identified through a public health or state of emergency act)?

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that a special emergency public financing system exists in case of a public health emergency in Spain. The flu pandemic emergency preparedness plan does not mention that there is a national funding mechanism [1] and there is no pandemic funding mechanism at the European Union level [2,3]. Spain is not eligible to borrow funds from the World Bank pandemic financing facility [4,5]. There is no information about the existence of a financing mechanism at the Ministry of Health or Defence. [6,7] Article 11 of the 2015 law on civil protection indicates that there is a fund for the prevention of emergencies, but this is primarily for conducting risk analysis and education programs, not for responding to health emergencies. [8] Additionally, in the State of Emergency law, published by the government in

March 2020 to deal with the COVID-19 pandemic there are no provisions for further emergency public financing, although there are provisions for additional public health services to help fight the health emergency. [9]

[1] Ministry of Health. 2005. "National Influenza Pandemic Preparedness and Response Plan (Plan nacional de preparación y respuesta ante una pandemia de gripe)".

[https://www.mscbs.gob.es/ciudadanos/enfLesiones/enfTransmisibles/docs/PlanGripeEspanol.pdf]. Accessed 22 December 2020

[2] World Bank Group. December 2017. "From Panic and Neglect to Investing in Health Security: Financing Pandemic Preparedness at a National Level". [http://documents.worldbank.org/curated/en/979591495652724770/pdf/115271-REVISED-FINAL-IWG-Report-3-5-18.pdf]. Accessed 22 December 2020

[3] European Centre for Disease Prevention and Control (ECDC). 2018. "Public health emergency preparedness: core competencies of EU member states". [https://ecdc.europa.eu/en/publications-data/public-health-emergency-preparedness-core-competencies-eu-member-states]. Accessed 22 December 2020

[4] World Bank Group. 2018. "Borrowing countries". [http://ida.worldbank.org/about/borrowing-countries]. Accessed 22 December 2020

[5] World Bank Group. December 2017. "Pandemic Emergency Financing Facility (PEF) Operational Brief for Eligible Countries". [http://pubdocs.worldbank.org/en/119961516647620597/PEF-Operational-Brief-Dec-2017.pdf]. Accessed 22 December 2020

[6] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). [https://www.mscbs.gob.es/en/]. Accessed 22 December 2020

[7] Ministry of Defence (Ministerio de Defensa). [www.dsn.gob.es]. Accessed 22 December 2020

[8] Government of Spain. 2015. "Law 17/2015 of 9 of July on the National System for Civil Protection (Ley 17/2015, de 9 de julio, del Sistema Nacional de Protección Civil)." [https://www.boe.es/buscar/pdf/2015/BOE-A-2015-7730-consolidado.pdf]. Accessed 22 December 2020

[9] Official Bulletin (Boletin Oficial). 2020. "Decree 463/2020 on the Emergency State to Manage the Sanitary Crisis Resulting from Covid-19 (Estado de Alarma para la Gestión de la Situación de Crisis Sanitaria Ocasionada por el Covid-19)". [https://www.boe.es/boe/dias/2020/03/14/pdfs/BOE-A-2020-3692.pdf]. Accessed 22 December 2020

5.5.4 Accountability for commitments made at the international stage for addressing epidemic threats

5.5.4a

Is there evidence that senior leaders (president or ministers), in the past three years, have made a public commitment either to:

- Support other countries to improve capacity to address epidemic threats by providing financing or support?

- Improve the country's domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity?

Needs to meet at least one of the criteria to be scored a 1 on this measure., Yes for both = 1, Yes for one = 1, No for both = 0

Current Year Score: 0

There is insufficient publicly available evidence that Spain's senior leaders have made commitments to support other countries to improve capacity to address epidemic threats, and evidence of commitments to improve domestic capacity to address epidemic threats within the past three years. There is, however, evidence of support for health systems and infectious diseases with non-pandemic potential. There is also evidence that the country more broadly is supporting capacity improvement efforts, although insufficient evidence of senior leader statements on the matter. In September 2019, Spain pledged contributions of \$118M USD to the Global Fund to fight AIDS, Tuberculosis and Malaria, which fund programmes to

improve health service capacity, education programmes and investment in data systems. [1,2] There is evidence the country has allocated 16.000 million euros (19.500 million dollars) national funds to fight existing threats, when dealing with the COVID-19 pandemic, however these efforts are not to improve capacity for future threats. [1] There is no evidence on the websites of the Ministry of Health or within press releases on commitments to improve domestic capacity to address new epidemic threats. [3]

[1] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social).

[https://www.mscbs.gob.es/en/]. Accessed 22 December 2020

[2] The Global Fund. 2017. "Global Fund Strategy 2017-2022". pp19.

[https://www.theglobalfund.org/media/2531/core globalfundstrategy2017-

2022_strategy_en.pdf?u=637207339610000000]. Accessed 17 January 2021

[3] Donor Tracker. 2020. "Donor tracker: Spain". [https://donortracker.org/country/spain]. Accessed 22 December 2020

5.5.4b

Is there evidence that the country has, in the past three years, either:

Provided other countries with financing or technical support to improve capacity to address epidemic threats?
 Requested financing or technical support from donors to improve the country's domestic capacity to address epidemic threats?

Needs to meet at least one of the criteria to be scored a 1 on this measure., Yes for both = 1, Yes for one = 1, No for both = 0 Current Year Score: 1

In the past three years, Spain has invested financing to support other countries to improve capacity to address epidemic threats, but there is no publicly available evidence Spain has improved its own domestic capacity to address epidemic threats. The Global Health Security Tracker shows that Spain has supported several countries in improving health capacity, such as \$842k USD disbursed to Mozambique in 2018 to improve primary care facilities in the Cabo Delgado region; \$1.4M USD disbursed to Mali between 2018 to 2020 to improve Universal Health Care, with special focus on expanding healthcare for reproductive health and children health care; or \$843k USD for Paraguay between 2018 and 2019 to improve women access to healthcare for the prevention and treatment of breast and uterin cancer. [1] In September 2019, the Spanish Prime Minister pledged contributions of \$118M USD to the Global Fund to fight AIDS, Tuberculosis and Malaria. [2] In addition, as a Member State of the European Union, Spain contributes financing to the European Development Programme, which specially mentions infectious disease outbreaks and pandemic preparedness. [3] There is no publicly available evidence that Spain has invested financing or requested support in the past three years to improve domestic capacity to address epidemic threats. There is no evidence on the websites of the Ministry of Health on the subject. [4]

[1] Global Health Security Funding Tracker. 2020. "Spain: Funder Profile". [https://tracking.ghscosting.org/details/72/funder]. Accessed 21 December 2020

[2] Donor Tracker. 2020. "Donor tracker: Spain". [https://donortracker.org/country/spain]. Accessed 21 December 2020[3] Donor Tracker. 2017. "Where is Europe's development aid going?".

[https://donortracker.org/sites/default/files/highlightstories/pdf/donor-tracker-brief_where-is-europe-s-development-aid-going.pdf]. Accessed 21 December 2020

[4] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social). [https://www.mscbs.gob.es/en/]. Accessed 21 December 2020

5.5.4c

Is there evidence that the country has fulfilled its full contribution to the WHO within the past two years?



Yes = 1 , No = 0

Current Year Score: 1

2021

Economist Impact analyst qualitative assessment based on official national sources, which vary by country

5.6 COMMITMENT TO SHARING OF GENETIC AND BIOLOGICAL DATA AND SPECIMENS

5.6.1 Commitment to sharing genetic data, clinical specimens, and/or isolated specimens (biological materials) in both emergency and nonemergency research

5.6.1a

Is there a publicly available plan or policy for sharing genetic data, clinical specimens, and/or isolated specimens (biological materials) along with the associated epidemiological data with international organizations and/or other countries that goes beyond influenza?

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of a publicly available plan or policy for sharing genetic data, clinical specimens, and/or isolated specimens (biological materials) along with the associated epidemiological data with international organizations and/or other countries that goes beyond influenza. In 2020 the National Microbiology Centre shared SARS-CoV2 genome sequencing data with international platforms such as GISAID and Nextstrain, however this falls short of sharing specimens or biological data with other countries. [1] Spain is part of the EU, therefore it is also a member of the European Centre for Disease Prevention and Control (ECDC). Decision 1082/2013/EU establishes the Epidemic Intelligence Information System (EPIS) across EU member states, which "aims to ensure transparent and timely information sharing among the participating public health authorities in order to detect public health threats at an early stage". [2] Spain shares surveillance data on 56 communicable diseases and related special health issues with the ECDC via The European Surveillance System (TESSy), which coordinates data submissions with the WHO's Spanish office. As agreed by all EU Member States, surveillance data comprises demographic, clinical, epidemiological and laboratory information. They are reported annually (for most diseases and special health issues), monthly (for salmonella serotypes, measles and rubella), weekly (for influenza and West Nile fever) or daily (for travel-associated Legionnaires' disease), as required for specific objectives, outputs and ensuing public health actions. [3] Spanish procedure documents on the flu and other diseases specify the flow of surveillance data sharing with the ECDC and EU disease-specific networks, but there is a lack of evidence for sharing specimens. [4] There is no additional information on the websites of the Ministry of Health, Ministry of Agriculture, or the Carlos III Health Institute. [5,6,7]

[1] Ministry of Science and Innovation (Ministerio de Ciencia e Innovacion). 2020. "The National Center for Microbiology carries out the complete sequencing of SARS-CoV2 in patient samples from different parts of Spain (El Centro Nacional de Microbiología realiza la secuenciación completa del SARS-CoV2 en muestras de pacientes de distintas partes de España)". [https://www.lamoncloa.gob.es/serviciosdeprensa/notasprensa/ciencia-e-innovacion/Paginas/2020/310320-microbiologia.aspx]. Accessed 21 December 2020

[2] European Centre for Disease Prevention and Control. "Epidemic Intelligence Information System (EPIS)".

[https://ecdc.europa.eu/en/publications-data/epidemic-intelligence-information-system-epis]. Accessed 21 December 2020 [3] European Centre for Disease Prevention and Control. "Surveillance". [https://ecdc.europa.eu/en/about-us/what-we-



do/surveillance]. Accessed 21 December 2020

[4] Carlos III Health Institute. 2019. "Guide for assessing the severity of influenza epidemics and pandemics in Spain" ("Guía para la evaluación de la gravedad de las epidemias y pandemias de gripe en España").

[https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/EnfermedadesTransmisibles/Documents/GRIPE/ GUIAS/Guia_Evaluacion_Gravedad_Epidemias_Gripe_28Marzo2019.pdf]. Accessed 21 December 2020

[5] Ministry of Health, Consumption and Social Welfare (Ministerio de Sanidad, Consumo y Bienestar Social).

[https://www.mscbs.gob.es/en/]. Accessed 21 December 2020

[6] Ministry of Agriculture, Fisheries and Food (Ministerio de Agricultura, Pesca y Alimentacion). [https://www.mapa.gob.es/]. Accessed 21 December 2020

[7] Carlos III Health Institute (Instituto de Salud Carlos III). [http://isciii.es/]. Accessed 21 December 2020

5.6.1b

Is there public evidence that the country has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past two years?

Yes = 0 , No = 1

Current Year Score: 1

There is no evidence that Spain has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past two years. There is no evidence that Spain has withheld samples either via the WHO or in media sources. [1]

[1] World Health Organization. [https://www.who.int]. Accessed 21 December 2020

5.6.1c

Is there public evidence that the country has not shared pandemic pathogen samples during an outbreak in the past two years?

Yes = 0 , No = 1

Current Year Score: 1

There is no evidence that Spain has not shared pandemic pathogen samples during an outbreak in the past two years, either via the WHO website or in the news media. There is no evidence Spain has not shared COVID-19 samples in the WHO website or in the news media. [1]

[1] World Health Organization. [https://www.who.int]. Accessed 21 December 2020



Category 6: Overall risk environment and vulnerability to biological threats

6.1 POLITICAL AND SECURITY RISK

6.1.1 Government effectiveness

6.1.1a

Policy formation (Economist Intelligence score; 0-4, where 4=best) Input number

Current Year Score: 2

2020

Economist Intelligence

6.1.1b

Quality of bureaucracy (Economist Intelligence score; 0-4, where 4=best) Input number Current Year Score: 3

Current Year Score

2020

Economist Intelligence

6.1.1c

Excessive bureaucracy/red tape (Economist Intelligence score; 0-4, where 4=best) Input number Current Year Score: 3

2020

Economist Intelligence

6.1.1d

Vested interests/cronyism (Economist Intelligence score; 0-4, where 4=best) Input number

Current Year Score: 2

2020

Economist Intelligence



6.1.1e

Country score on Corruption Perception Index (0-100, where 100=best) Input number

Current Year Score: 62

2020

Transparency International

6.1.1f

Accountability of public officials (Economist Intelligence score; 0-4, where 4=best) Input number

Current Year Score: 3

2020

Economist Intelligence

6.1.1g

Human rights risk (Economist Intelligence score; 0-4, where 4=best) Input number

Current Year Score: 3

2020

Economist Intelligence

6.1.2 Orderly transfers of power

6.1.2a

How clear, established, and accepted are constitutional mechanisms for the orderly transfer of power from one government to another?

Very clear, established and accepted = 4, Clear, established and accepted = 3, One of the three criteria (clear, established, accepted) is missing = 2, Two of the three criteria (clear, established, accepted) are missing = 1, Not clear, not established, not accepted = 0

Current Year Score: 3

2021

Economist Intelligence



6.1.3 Risk of social unrest

6.1.3a

What is the risk of disruptive social unrest?

Very low: Social unrest is very unlikely = 4, Low: There is some prospect of social unrest, but disruption would be very limited = 3, Moderate: There is a considerable chance of social unrest, but disruption would be limited = 2, High: Major social unrest is likely, and would cause considerable disruption = 1, Very high: Large-scale social unrest on such a level as to seriously challenge government control of the country is very likely = 0

Current Year Score: 2

2021

Economist Intelligence

6.1.4 Illicit activities by non-state actors

6.1.4a

How likely is it that domestic or foreign terrorists will attack with a frequency or severity that causes substantial disruption? No threat = 4, Low threat = 3, Moderate threat = 2, High threat = 1, Very high threat = 0

Current Year Score: 3

2021

Economist Intelligence

6.1.4b

What is the level of illicit arms flows within the country? 4 = Very high, 3 = High, 2 = Moderate, 1 = Low, 0 = Very low Current Year Score: 0

2020

UN Office of Drugs and Crime (UNODC)

6.1.4c

How high is the risk of organized criminal activity to the government or businesses in the country? Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0

Current Year Score: 3

2021

Economist Intelligence



6.1.5 Armed conflict

6.1.5a

Is this country presently subject to an armed conflict, or is there at least a moderate risk of such conflict in the future? No armed conflict exists = 4, Yes; sporadic conflict = 3, Yes; incursional conflict = 2, Yes, low-level insurgency = 1, Yes; territorial conflict = 0

Current Year Score: 4

2021

Economist Intelligence

6.1.6 Government territorial control

6.1.6a

Does the government's authority extend over the full territory of the country? Yes = 1, No = 0 Current Year Score: 1

2021

Economist Intelligence

6.1.7 International tensions

6.1.7a

Is there a threat that international disputes/tensions could have a negative effect? No threat = 4, Low threat = 3, Moderate threat = 2, High threat = 1, Very high threat = 0 Current Year Score: 3

2021

Economist Intelligence

6.2 SOCIO-ECONOMIC RESILIENCE

6.2.1 Literacy

6.2.1a

Adult literacy rate, population 15+ years, both sexes (%) Input number

Current Year Score: 98.44

2018



United Nations Development Programme (UNDP); United Nations Educational, Scientific and Cultural Organization (UNESCO); The Economist Intelligence Unit

6.2.2 Gender equality

6.2.2a

United Nations Development Programme (UNDP) Gender Inequality Index score Input number

Current Year Score: 0.93

2018

United Nations Development Programme (UNDP); The Economist Intelligence Unit

6.2.3 Social inclusion

6.2.3a

Poverty headcount ratio at \$1.90 a day (2011 PPP) (% of population) Input number

Current Year Score: 0.5

2017

World Bank; Economist Impact

6.2.3b

Share of employment in the informal sector Greater than 50% = 2, Between 25-50% = 1, Less than 25% = 0 Current Year Score: 1

Spanish share of employment in the informal sector is 27.3% in 2017, according with an International Labour Office study. [1]

[1] International Labour Office. 2018. "Women and men in the Informal Economy: A Statistical Picture". pp102.
 [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms_626831.pdf]. Accessed
 22 December 2020

6.2.3c

Coverage of social insurance programs (% of population) Scored in quartiles (0-3, where 3=best) Current Year Score: 3

2016, or latest available



World Bank; Economist Impact calculations

6.2.4 Public confidence in government

6.2.4a

Level of confidence in public institutions Input number Current Year Score: 0

2021

Economist Intelligence Democracy Index

6.2.5 Local media and reporting

6.2.5a

Is media coverage robust? Is there open and free discussion of public issues, with a reasonable diversity of opinions? Input number

Current Year Score: 2

2021

Economist Intelligence Democracy Index

6.2.6 Inequality

6.2.6a

Gini coefficient Scored 0-1, where 0=best Current Year Score: 0.35

Latest available.

World Bank; Economist Impact calculations

6.3 INFRASTRUCTURE ADEQUACY

6.3.1 Adequacy of road network

6.3.1a

What is the risk that the road network will prove inadequate to meet needs? Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0 Current Year Score: 4



2021

Economist Intelligence

6.3.2 Adequacy of airports

6.3.2a

What is the risk that air transport will prove inadequate to meet needs? Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0 Current Year Score: 4

2021

Economist Intelligence

6.3.3 Adequacy of power network

6.3.3a

What is the risk that power shortages could be disruptive? Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0 Current Year Score: 3

2021

Economist Intelligence

6.4 ENVIRONMENTAL RISKS

6.4.1 Urbanization

6.4.1a

Urban population (% of total population) Input number Current Year Score: 80.56

2019

World Bank

6.4.2 Land use

6.4.2a

Percentage point change in forest area between 2006–2016 Input number



Current Year Score: 0.56

2008-2018

World Bank; Economist Impact

6.4.3 Natural disaster risk

6.4.3a

What is the risk that the economy will suffer a major disruption owing to a natural disaster? Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0 Current Year Score: 4

2021

Economist Intelligence

6.5 PUBLIC HEALTH VULNERABILITIES

6.5.1 Access to quality healthcare

6.5.1a

Total life expectancy (years) Input number Current Year Score: 83.43

2018

United Nations; World Bank, UNICEF; Institute for Health Metrics and Evaluation (IHME); Central Intelligence Agency (CIA) World Factbook

6.5.1b

Age-standardized NCD mortality rate (per 100 000 population) Input number

Current Year Score: 282.1

2019

WHO

6.5.1c

Population ages 65 and above (% of total population) Input number



Current Year Score: 19.65

2019

World Bank

6.5.1d

Prevalence of current tobacco use (% of adults) Input number Current Year Score: 27.9

2018

World Bank

6.5.1e

Prevalence of obesity among adults Input number Current Year Score: 23.8

2016

WHO

6.5.2 Access to potable water and sanitation

6.5.2a

Percentage of homes with access to at least basic water infrastructure Input number

Current Year Score: 99

2017

UNICEF; Economist Impact

6.5.2b

Percentage of homes with access to at least basic sanitation facilities Input number

Current Year Score: 99

2017



UNICEF; Economist Impact

6.5.3 Public healthcare spending levels per capita

6.5.3a

Domestic general government health expenditure per capita, PPP (current international \$) Input number

Current Year Score: 2517.97

2018

WHO Global Health Expenditure database

6.5.4 Trust in medical and health advice

6.5.4a

Trust medical and health advice from the government

Share of population that trust medical and health advice from the government , More than 80% = 2, Between 60-80%, or no data available = 1, Less than 60% = 0

Current Year Score: 1

2018

Wellcome Trust Global Monitor 2018

6.5.4b

Trust medical and health advice from medical workers

Share of population that trust medical and health advice from health professionals , More than 80% = 2, Between 60-80%, or no data available = 1, Less than 60% = 0

Current Year Score: 2

2018

Wellcome Trust Global Monitor 2018