Portugal

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

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

There is evidence that Portugal has a national AMR plan for the surveillance, detection and reporting of priority AMR pathogens. Portugal has the "Programme for the Prevention and Control of Infections and Antimicrobial Resistance" of 2017, published by the Directorate-General of Health, part of the Ministry of Health. [1] In the section dedicated to activities fulfilled in 2016 and 2017, there are chapters detailing actions in surveillance (starting on page 17), detection (page 17) and reporting (page 18). [1] In addition, as a member-state of the European Union (EU), Portugal is also part of the "A European One Health Action Plan against Antimicrobial Resistance (AMR)", a EU initiative from 2017. [2] Both plans include surveillance, detection and reporting of AMR pathogens.

[1] General Directorate of Health. 2017. "Programme for the Prevention and Control of Infections and Antimicrobial Resistance (Programa de Prevenção e Controlo de Infeções e Resistências aos Antimicrobianos)". [https://www.sns.gov.pt/wp-content/uploads/2017/12/DGS_PCIRA_V8.pdf]. Accessed 1 October 2020.
[2] European Commission. 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 1 October 2020.

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

There is evidence that Portugal has a national laboratory system that tests for all priority AMR pathogens. Portugal has the National Reference Laboratory for Antimicrobial Resistance (LNR-RA) of the National Service of Health and serves as the coordinating laboratory for the European Antimicrobial Resistance Surveillance Network (EARS-Net) in the country, which is in turn financed by the European Centre for Diseases Prevention and Control (ECDC). EARS-Net programme is an international network of national surveillance systems. [1] EARS-Net conducts tests for Escherichia coli, Klebsiella pneumoniae, Streptococcus pneumoniae, and Staphylococcus aureus, which are four out of seven WHO priority pathogens. In addition, EARS-Net also tests Pseudomonas aeruginosa, Acinetobacter species, Enterococcus faecalis, and Enterococcus faecium. [2] In addition, the LNR-RA has published studies, including the report "Program for the Prevention and Control of Infections and Antimicrobial Resistance of 2017", that serve as evidence that it is capable of testing for priority AMR pathogens: E. coli [3,4], K. pneumonia [3,5], S. aureus [3,6], and S. pneumoniae [3,7]. The website of the LNR-RA explicitly

mentions that it conducts tests for multi-resistant strains of those AMR pathogens. [1] In addition, there is also evidence that the National Health Institute Doctor Ricardo Jorge (INSA) tests for salmonella spp. [8], shigella spp. [9], neisseria gonorrhoeae [10], and mycobacterium tuberculosis [11]. Those tests include for drug-resistant strains for all mentioned pathogens. [8,9,10,11]

[1] National Service of Health. "Resistence to microbes (Resistência aos microbianos)". [http://www2.insa.pt/sites/INSA/Portugues/AreasCientificas/DoencasInfecciosas/AreasTrabalho/ResistencAnti/Paginas/inicial.aspx]. Accessed 1 October 2020.
[2] European Centre for Disease Prevention and Control. "European Antimicrobial Resistance Surveillance Network (EARS-Net): Data collection and analysis". [https://www.ecdc.europa.eu/en/about-us/networks/disease-networks-and-laboratory-networks/ears-net-data]. Accessed 1 October 2020.
[3] General Directorate of Health. 2017. "Programme for the Prevention and Control of Infections and Antimicrobial Resistance (Programa de Prevenção e Controlo de Infeções e Resistências aos Antimicrobianos)". [https://www.sns.gov.pt/wp-content/uploads/2017/12/DGS_PCIRA_V8.pdf]. Accessed 1 October 2020.
[4] Nicolas-Chanoine, M-H, et al. 2008. "Intercontinental Emergence of Escherichia Coli Clone ST131 Producing". Journal of Antimicrobial Chemotherapy, 61:273-81. [http://www2.insa.pt/sites/INSA/Portugues/Publicacoes/Artigos/Paginas/EcoliCLONEST131.aspx]. Accessed 1 October 2020.
[5] Mendonça, N. 2008. "Biochemical Characterization of SHV-55, An Extended-Spectrum Class a Beta-Lactamase from Klebsiella Pneumoniae". Antimicrobial Agents and Chemotherapy, 52:1897-8. [http://www2.insa.pt/sites/INSA/Portugues/Publicacoes/Artigos/Paginas/SHV-55Kpneumoniae.aspx]. Accessed 1 October 2020.
[6] Tiemersma, E.W., et al. 2004. "Methicillin-Resistant Staphylococcus Aureus in Europe, 1999-2002". Emerging Infectious Diseases, 10:1627-34. [http://www2.insa.pt/sites/INSA/Portugues/Publicacoes/Artigos/Paginas/RESISAUREUSEUR1999%E2%80%932002.aspx]. Accessed 1 October 2020.
[7] Dias, R., et al. 2008. "Diversity of Penicillin Binding Proteins from Streptococcus Pneumoniae Among Portuguese Clinical Strains". Antimicrobial Agents and Chemotherapy, 52:2693-5. [http://www2.insa.pt/sites/INSA/Portugues/Publicacoes/Artigos/Paginas/SpneumoniaePORTCLI.aspx]. Accessed 1 October 2020.
[8] Silveira, L. December 2019. "Phenotypic and Genotypic characterization of Salmonella spp. isolates in Portugal". [http://repositorio.insa.pt/bitstream/10400.18/7194/1/Silveira_2019.pdf]. Accessed 1 October 2020.
[9] Silveira, L., Pista, A., Machado, J. 2018. "Phenotypic characterization of isolates of Shigella spp. between 2015 and 2017". [http://repositorio.insa.pt/bitstream/10400.18/5550/1/Boletim_Epidemiologico_Observacoes_N21_2018_artigo5.pdf]. Accessed 1 October 2020.
[10] Rodrigues, J.C., et al. 2014. "Laboratorial surveillance for Neisseria gonorrhoeae in Portugal, 2004-2013 (Vigilância laboratorial das infeções por Neisseria gonorrhoeae em Portugal, 2004-2013)". [http://repositorio.insa.pt/bitstream/10400.18/2373/3/Boletim_Epidemiologico_Observacoes_N10_outubro-dezembro_2014.pdf]. Accessed 1 October 2020.
[11] Macedo, R., et al. December 2013. "Laboratorial surveillance of tuberculosis in Portugal (Vigilância Laboratorial da Tuberculose em Portugal)". [http://repositorio.insa.pt/bitstream/10400.18/1881/6/Vigilancia_Laboratorial_da_Tuberculose_em_Portugal-Relatorio_2012.pdf]. Accessed 1 October 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 evidence that the Portuguese government conducts detection and surveillance activities for antimicrobial residues or AMR organisms. The Portuguese Agency of the Environment (APA) has a network of laboratories spread throughout the country; however, its activities concentrate on evaluating the quality of air and water, rather than AMR-related surveillance. [1] The National Reference Laboratory for Antimicrobial Resistance (LNR-RA) recognises that AMR can be found in three types of carriers: humans, animals and the environment. Yet, there is no evidence that there are detection or surveillance activities for AMR by the LNR-RA either. [2] The Priority Programme Annual Report on Infections and Antimicrobial Resistance of Portugal also recognises the risks associated with AMR organisms in the environment. Furthermore, it mentions as one of its next steps to develop with Directorate-General of Nutrition and Veterinary and the APA the Prevention and Control Programme of Infections and AMR, in line with the One Health programme. [3] This indicates that there is still no alignment of the APA with AMR surveillance. In September 2019, the General Directorate of Health published the National Plan to Combat Antimicrobial Resistence 2019-2023. The Plan outlines six key objectives, including the strengthening of knowledge base and evidence through epidemiological surveillance, environmental surveillance and investigation (Objective 3). To achieve that objective, the plan outlines three measures, including increasing surveillance and knowledge sharing for antimicrobial contamination in water resources. [4] As of October 2020, there was no evidence in the General Directorate of Health website that there were material advancements on this measure. [5]

[1] Portuguese Agency of the Environment. "Laboratory Network (Rede Laboratorial)". [https://www.apambiente.pt/index.php?ref=17&subref=161]. Accessed 1 October 2020.
[2] National Service of Health. "Resistence to microbes (Resistência aos microbianos)". [http://www2.insa.pt/sites/INSA/Portugues/AreasCientificas/DoencasInfecciosas/AreasTrabalho/ResistencAnti/Paginas/inicial.aspx]. Accessed 1 October 2020.
[3] General Directorate of Health. "Infections and Antimicrobial Resistence: Annual Report of the Priority Programme 2018 (Infeções e Resistências aos Antimicrobianos: Relatório Anual do Programa Prioritário 2018)". [https://www.dgs.pt/documentos-e-publicacoes/infecoes-e-resistencias-aos-antimicrobianos-2018-relatorio-anual-do-programa-prioritario.aspx]. Accessed 1 October 2020.
[4] General Directorate of Health. September 2019. "National Plan to Combat Antimicrobial Resistence 2019-2023 (Plano National de Combate à Resistência aos Antimicrobianos 2019-2023)". [https://www.dgs.pt/documentos-e-publicacoes/plano-nacional-de-combate-a-resistencia-aos-antimicrobianos-2019-2023-pdf.aspx]. Accessed 1 October 2020.
[5] General Directorate of Health website. [https://www.dgs.pt/]. Accessed 1 October 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: 2

Portugal has national legislation in place requiring prescriptions for antibiotics use for humans. Portugal has the "Norms on prescriptions of drugs and health products" by the National Authority of Drugs and Health Products (INFARMED), which categorizes antibiotics as medications that require prescriptions. [1] Decree-Law number 46 of 2012 establishes INFARMED, and makes it responsible, by law, to establish which medications require medical prescriptions, according to Article 15. [2] In addition, there are articles by the National Service of Health (SNS) of Portugal that recognises achievements by regional governments in reducing the consumption of antibiotics with the objective of controlling antimicrobial resistance. According

to the SNS, between 2009 and 2017, prescriptions of antibiotics fell by 10% in the region of Algarve. [3] No evidence was found that there are gaps in enforcement in the websites of major news sources, the National Service of Health, or the General Directorate of Health. [4,5]

[1] National Authority of Drugs and Health Products. "Norms on prescriptions for medications and health products (Normas relativas à prescrição de medicamentos e produtos de saúde)". [http://www.infarmed.pt/documents/15786/17838/Normas_Prescri%C3%A7%C3%A3o/bcd0b378-3b00-4ee0-9104-28d0db0b7872]. Accessed 1 October 2020.
[2] Government of Portugal. Decree-law number 26 of February 24th 2012 on Approving the creation of INFARMED - the National Authority of Drugs and Health Products. [http://www.infarmed.pt/documents/15786/1065790/007_Dec-Lei_46_2012_1ALT.pdf/3324aefd-d680-46d9-a6fc-74a253c58d4e?version=1.0]. Accessed 1 October 2020.
[3] National Service of Health. 19 November 2018. "ARS Algarve improves control of bacterial resistence (ARS Algarve melhora controlo das resistências bacterianas)". [https://www.sns.gov.pt/noticias/2018/11/19/prescricao-de-antibioticos-2/]. Accessed 1 October 2020.
[4] National Service of Health website. [https://www.sns.gov.pt/]. Accessed 1 October 2020.
[5] General Directorate of Health website. [https://www.dgs.pt/]. Accessed 1 October 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

Portugal has national legislation in place requiring prescriptions for antibiotic use for animals. Decree-Law number 148 of July 29th 2008 regulates veterinary drugs and health products in Portugal. It was developed under the responsibility of the Ministry of Agriculture, Rural Development and Fisheries. The Decree-Law regulates the utilisation of veterinary drugs, and it explicitly recognises the issue of antimicrobial resistance. It clearly states that medications that do not require prescriptions include medications that have no studies linking them to AMR (Article 73, 1h) and that medications that require prescriptions are those in which there is a possibility they could contribute to AMR (Article 74, g). [1] The control of prescriptions is under the jurisdiction of the General Directorate of Food and Veterinary (DGAV), an agency under the Ministry of Agriculture. No evidence was found that there are gaps in enforcement in the websites of major news sources, the General Directorate of Food and Veterinary, or the General Directorate of Health. [4,5]

[1] Ministry of Agriculture, Rural Development and Fisheries. 2008. "Decree-law number 148 of 2008". [http://www.dgv.min-agricultura.pt/xeov21/attachfileu.jsp?look_parentBoui=50073&att_display=n&att_download=y]. Accessed 1 October 2020.
[2] General Directorate of Food and Veterinary website. [http://www.dgv.min-agricultura.pt/portal/page/portal/DGV]. Accessed 1 October 2020.
[3] General Directorate of Health website. [https://www.dgs.pt/]. Accessed 1 October 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

Portugal has a set of plans and legislation on zoonotic diseases. Although there is no evidence that Portugal has an overarching strategy document on zoonotic diseases, it has taken various efforts to address zoonotic diseases which together constitute a strategy. The General Directorate of Food and Veterinary (DGAV) has developed the National Action Plan for the Reduction of Antibiotic Use in Animals. The Plan is set for 2014-2019 and it aims to address the issue of AMR in the veterinary context by promoting surveillance, innovation and technology transfers, as well as providing information to the public. For that, the plan has the objective of protecting public health via the One Health programme, and maintaining medical countermeasures. No specific zoonotic diseases are mentioned in the plan. There is no evidence that the plan for 2014-2019 has been updated for 2020 forward. [1] In addition, Decree-Law number 3461 of August 16th 2017 approves the National Programme for the Fight and Epidemiological Surveillance of Animal Rabies and other Zoonoses (PNLVERAZ) in Portugal. The Decree-Law lays down measures for the prevention of animal rabies and for necessary clinical and epidemiological surveillance to maintain control of animal rabies and other zoonoses in the country. [2] Besides rabies, the Programme also explicitly mentions leishmaniosis and dermatophytosis. [2] In addition, the National Institute of Health also has the National Reference Laboratory for Systemic Infections and Zoonoses, which tests for Toxoplasma gondii, Echinococcus granulosus, Leishmania sp., Plasmodium sp., Trypanosoma sp., and Trichinella sp. [3]

[1] General Directorate of Food and Veterinary. "National Action Plan to Reduce Use of Antibiotics on Animals (Plano de Ação Nacional para a Redução do Uso de Antibióticos nos Animais)". [http://apps.who.int/datacol/answer_upload.asp?survey_id=666&view_id=722&question_id=13164&answer_id=19959&respondent_id=206836]. Accessed 1 October 2020.
[2] General Directorate of Food and Veterinary. Decree-law number 3461 of 2007. [https://dre.pt/application/file/a/106912870]. Accessed 1 October 2020.
[3] National Institute of Health. "Systemic and zoonotic infections (Infecções sistémicas e zooneses)". [http://www2.insa.pt/sites/INSA/Portugues/AreasCientificas/DoencasInfecciosas/AreasTrabalho/DoencasSist/Paginas/inicial.aspx]. Accessed 1 October 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

There is insufficient evidence that there are plans which include measures for risk identification and reduction for zoonotic disease spillover events from animals to humans.

Portugal has some disease-specific plans when it comes to zoonoses. There is no overarching plan. The West Nile Fever Surveillance Plan of 2010 includes measures to identify and reduce propogation of the disease through surveillance, monitoring and early detection; there are no other preventative measures outlined in the plan. The Plan includes measures to identify high-risk areas and to monitor wild birds and equines in those areas. [1]

The National Programme for the Fight and Epidemiological Surveillance of Animal Rabies and other Zoonoses (PNLVERAZ) of 2017, while it tackles issues of prevention through broad vaccinations, there are no other preventative measures outlined to reduce spillover events. [2] No further evidence was found in the websites of the National Service of Health, the General Directorate of Health or the General Directoral of Food Veterinary. [3,4,5]

[1] General Directorate of Food and Veterinary. 2010. "West Nile Fever Surveillance Plan (Plano de Vigilância Febre do Nilo Ocidental)".
[http://www.enduranceportugal.pt/enduranceportugal/Noticias_Nacionais/Entradas/2015/9/1_Febre_do_Nilo_Ocidental_1_files/Plano%20de%20Vigila%CC%82ncia-Febre%20Virus%20Nilo%20Ocidental.pdf]. Accessed 7 April 2021.
[2] General Directorate of Food and Veterinary. Decree-law number 3461 of 2007.
[https://dre.pt/application/file/a/106912870]. Accessed 7 April 2021.
[3] National Service of Health website. [https://www.sns.gov.pt/]. Accessed 7 April 2021.
[4] General Directorate of Health website. [https://www.dgs.pt/]. Accessed 7 April 2021.
[5] General Directorate of Food and Veterinary website. [http://www.dgv.min-agricultura.pt/portal/page/portal/DGV]. Accessed 47 April 2021.

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

Portugal has plans that account for the surveillance and control of multiple zoonotic pathogens of public health concern. The General Directorate of Food and Veterinary has specific plans for the surveillance and control of bovine tuberculosis, bovine brucellosis, avian influenza, salmonella, and rabies. [1] Decree-Law number 3461 of August 16th 2017 approves the National Programme for the Combat and Epidemiological Surveillance of Animal Rabies and other Zoonoses (PNLVERAZ) in Portugal. The Decree-Law lays down measures for the prevention of animal rabies and for necessary clinical and epidemiological surveillance to maintain control of animal rabies and other zoonoses in the country. [2] Besides rabies, the Programme also explicitly mentions leishmaniosis, scabies and dermatophytosis. the programme includes specific measures for leishmaniosis, scabies and dermatophytosis in Article 3.b.i. and Article 3.b.ii. [2]

[1] General Directorate of Food and Veterinary. "DGAV programmes: Veterinary programmes". [http://www.dgv.min-agricultura.pt/portal/page/portal/DGV/genericos?actualmenu=23822&generico=3180076&cboui=3180076]. Accessed 1 October 2020.
[2] General Directorate of Food and Veterinary. Decree-law number 3461 of 2007.
[https://dre.pt/application/file/a/106912870]. Accessed 1 October 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

There is no evidence that Portugal has a department, agency or similar unit dedicated to zoonotic disease that functions across ministries. Portugal has the General Directorate of Food and Veterinary (DGAV), which is the agency responsible for caring for, among other things, zoonotic diseases. The DGAV is responsible for the definition, execution and evaluation of policies on food safety, animal protection and animal health, plant protection and plant health. It functions as the national sanitary, veterinary, and phytosanitary authority, as well as the national authority on veterinary medicinal products and is responsible for the management of Portugal's food safety system. [1] However, there is no evidence that DGAV functions across ministries. The Decree-Law number 7 of January 17th 2012 establishes the DGAV and outlines its functions, responsibilities and scope in Article 13. There are no mention of any inter-ministerial functionality in the Decree-Law. [2] In

addition, Portugal also has the National Institute for Agrarian and Veterinary Investigation (INIAV). The INIAV is responsible for investigating cases of zoonotic disease and it is a reference laboratory. However, there is no evidence that it functions across ministries as it is housed under the Ministry of Agriculture. [3] No evidence was found in the websites for the Ministry of Health or the National Institute of Health. [4][5]

[1] General Directorate of Food and Veterinary. "DGAV - General Directorate of Food and Veterinary (DGAV - Direção-Geral de Alimentação e Veterinária)". [http://www.dgv.min-agricultura.pt/portal/page/portal/DGV/genericos?actualmenu=59989&generico=3630726&cboui=3630726]. Accessed 1 October 2020.
[2] Ministry of Agriculture, of the Sea, of Environment and Territory Order. Decree-Law number 7 of 2012. [http://www.dgv.min-agricultura.pt/xeov21/attachfileu.jsp?look_parentBoui=6826457&att_display=n&att_download=y]. Accessed 1 October 2020.
[3] National Institute for Agrarian and Veterinary Investigation. "Laboratories (Laboratórios)". [http://iniav.pt/menu-de-topo/laboratorios]. Accessed 1 October 2020.
[4] National Service of Health. "Health entities (Entidades de Saúde)". [https://www.sns.gov.pt/institucional/entidades-de-saude/]. Accessed 1 October 2020.
[5] National Institute of Health. "Who are we (Quem somos)". [http://www2.insa.pt/sites/INSA/Portugues/QuemSomos/Paginas/INSA.aspx]. Accessed 1 October 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: 0

There is insufficient evidence that Portugal has a national mechanism (either voluntary or mandatory) for owners of livestock to conduct and report on disease surveillance to a central government agency. There is a list of notifiable animal diseases that may be declared at national, European Union or international (OIE) levels. Certain notifiable diseases are mandatory when suspected, and there is provision for animal owners to submit notification. [1] No other information is available from the General Directorate of Food and Veterinary. [1]

[1] General Directorate of Food and Veterinary. "Mandatory reporting diseases (Doenças de declaração obrigatória)". [http://www.dgv.min-agricultura.pt/xeov21/attachfileu.jsp?look_parentBoui=2130110&att_display=n&att_download=y]. Accessed 1 October 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

There is insufficient evidence that Portugal has laws or guidelines that safeguard the confidentiality of information generated through surveillance activities of animals. Portugal is under the 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 specific and explicit provisions for data obtained for public health studies, but there are no explicit mention of animal health. [1] No further information was found in General Directorate of Food and Veterinary or the National Service of Health. [2, 3]

[1] European Parliament. Regulation (EU) 2016/679 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=OJ:L:2016:119:FULL&from=EN]. Accessed February 2019.
[2] General Directorate of Food and Veterinary website. [http://www.dgv.min-agricultura.pt/portal/page/portal/DGV]. Accessed 1 October 2020.
[3] National Service of Health website. [https://www.sns.gov.pt/]. Accessed 1 October 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

There is evidence that Portugal conducts surveillance of zoonotic disease in wildlife. Portugal has the Surveillance Network of Vectors (REVIVE), which has the main objectives of: "Monitor the activity of hematophagous arthropods; Characterize the species and their seasonal occurrence; Identify important pathogens in public health, depending on the density of insects, the level of infection or the introduction of exotic species to alert for control measures". [1] REVIVE is a network of laboratories and other medical and diagnostic facilities coordinated by the National Institute of Health, which conducts surveillance of vector-borne diseases. [1] REVIVE has specific programmes for mosquitoes and for ticks. [1] The report "REVIVE 2011-2015" in page 13 mentions that some diseases it monitors are dengue fever, West Nile virus, yellow fever, and Zika. [2] The 2019 report for REVIVE in pages 12-13 presents its methodology for surveillance, and it mentions West Nile virus, dengue, yellow fever, Zika and Japanese encephalitis. [3]

[1] National Service of Health. "REVIVE - Surveillance Network of Vectors (REVIVE - Rede de Vigilância de Vetores)". [http://www2.insa.pt/sites/INSA/Portugues/AreasCientificas/DoencasInfecciosas/AreasTrabalho/EstVectDoencasInfecciosas/Paginas/Revive.aspx]. Accessed 1 October 2020.
[2] National Institute of Health. 2016. "REVIVE 2011-2015". [http://repositorio.insa.pt//handle/10400.18/3781]. Accessed 1 October 2020.
[3] National Institute of Health. July 2020. "REVIVE 2019". [http://www.insa.min-saude.pt/category/areas-de-atuacao/doencas-infeciosas/revive-rede-de-vigilancia-de-vetores/]. Accessed 20 October 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: 61.19

2018

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: 1

Portugal, via the European Commission, has mechanisms to work with the private sector on the combat or surveillance of specific zoonotic diseases. For example, the Programme for the eradication of bovine tuberculosis, bovine brucellosis or sheep and goat brucellosis of the European Commission states in page 7 that, "most fields of this programme are implemented by private veterinarians from Livestock Producers Organisations (OPPs) which annual submit an annual sanitary programme to be approved by the official services". [1] In the National Programme on the Combat and Epidemiological Surveillance of Rabies and other Zoonoses, however, there is no mention of the private sector in the text. [2] On the other hand, the National Institute of Health's Department of Epidemiology (DEP), which covers zoonotic diseases in its surveillance, claims that it works with several actors, including the private sector, by providing consulting services given its expertise on the issue. Clients of the DEP's consulting services include the private sector and other government agencies, especially in the context of providing expertise on zoonotic diseases. [3]

[1] European Commission. 24 October 2016. "Annex I.b: Programme for the eradication of bovine tuberculosis, bovine brucellosis or sheep and goat brucellosis (B. melitensis)". [http://www.dgv.min-agricultura.pt/xeov21/attachfileu.jsp?look_parentBoui=22595071&att_display=n&att_download=y]. Accessed 1 October

2020.
[2] General Directorate of Food and Veterinary. Decree-law number 3461 of 2017.
[https://dre.pt/application/file/a/106912870]. Accessed 1 October 2020.
[3] National Institute of Health. "Epidemiology (Epidemiologia)".
[http://www2.insa.pt/sites/INSA/Portugues/AreasCientificas/Epidemiologia/Paginas/inicial.aspx]. Accessed 1 October 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: 0

There is insufficient evidence that Portugal has in place a record of the facilities in which especially dangerous pathogens. No evidence was found in the websites of the National Institute of Health. [1] The National Institute of Health in 2012 held a workshop on the current situation of biosecurity in Portugal. The workshop produced a document that summarised the findings from the biosecurity experts in Portugal. The findings in page 90 included the recommendation of creating a National Network of Biosecurity Laboratories, which would have a record of pathogens and toxins. [2]. The Portuguese Laboratory Network of Biosecurity (Lab-PTBioNet) exists, and it lists as one of its responsibilities "to execute an inventory of infectious agents, cellular lines that each laboratory possesses". [3] However, there is no public record of the inventory nor is there any information on when it was last updated. No evidence has been found in the Ministry of Defence website either, although there is the Laboratory of Biological Defence of the Army (LBDE). The LBDE is responsible for providing intelligence and analysis of biological threats. No evidence has been found that it maintains a record of pathogens and toxins stored or processed in facilities in Portugal. [4,5] While the Global Health Security Agenda Pilot Assessment of Portugal of 2015 notes that "the access to sensitive information (e.g. inventory of agents and toxins) is controlled by adequate policies and procedures," there is no mention of if and where inventory records are kept. [6] Although Portugal reports to the United Nations Office at Geneva (UNOG) every year for the "Confidence Building Measure Return" under the Biological Weapons Convention, the reports do not contain information on inventory management. The reporting includes data on Biosafety Level (BSL) facilities, their level, location, floor area of the laboratory, types of pathogens stored and processed, the organizational structure of the facilities, etc. [7,8] No other information was found in the websites for the Ministry of Health, Ministry of National Defence, Ministry of Agriculture, Forests and Rural Development. [9,10] Portugal does not have a Ministry of Research. [11] No evidence was found in the VERTIC database. [12]

[1] National Institute of Health. "Health Observation (Observação de Saúde)".
[http://www2.insa.pt/sites/INSA/Portugues/AreasCientificas/Epidemiologia/Paginas/ObservacaoSaude.aspx]. Accessed 1 October 2020.
[2] National Institute of Health. 2012 "Workshop: Biosecurity: Situation in Portugal (Workshop: Biossegurança: Situação em Portugal)". [http://repositorio.insa.pt/bitstream/10400.18/1538/3/Workshop%20Biosseguran%C3%A7a%20-%20Situa%C3%A7%C3%A3o%20em%20Portugal.pdf]. Accessed 1 October 2020.
[3] Portuguese Laboratory Network of Biosecurity. "About (Sobre)". [http://www.labptbionet.ibmc.up.pt/sobre]. Accessed 1 October 2020.
[4] Ministry of Defence. 27 April 2018. "Minister of Defence visits laboratories and veterinary clinics of the Army (Ministro da

Defesa visita laboratórios e clínica veterinária do Exército)".
[https://www.defesa.gov.pt/pt/comunicacao/noticias/Paginas/Ministro-da-Defesa-visita-laboratorios-e-clinica-veterinaria-do-Exercito.aspx]. Accessed 1 October 2020.
[5] Penha-Gonçalves, C.A.G.B., et al. April 2016. "Biological Defence Laboratory of the Army: 10 years of life and 10 years into the future (Laboratório de Defesa Biológica do Exército: 10 anos de vida e 10 anos no futuro)". Revista Militar. [https://www.revistamilitar.pt/artigo/1111]. Accessed 1 October 2020.
[6] Global Health Security Agenda. 2015. "Global Health Security Pilot Assessment of Portugal: April 12 to 17, 2015". [https://www.ebola.dgs.pt/documentos-diversos/avaliacoes-externas-documento-ghsa-pdf.aspx]. Accessed 1 October 2020.
[7] United Nations Office at Geneva. 2020. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2020_portugal.pdf]. Accessed 1 October 2020.
[8] United Nations Office at Geneva. 2019. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2019_portugal.pdf]. Accessed 1 October 2020.
[9] Ministry of Health. "Ministry of Health (Ministério da Saúde)". [https://www.sns.gov.pt/institucional/ministerio-da-saude/]. Accessed 1 October 2020.
[10] Government of Portugal. "Agriculture, Forests and Rural Development (Agricultura, Florestas e Desenvolvimento Rural)". [https://www.portugal.gov.pt/pt/gc21/area-de-governo/agricultura-florestas-e-desenvolvimento-rural]. Accessed 1 October 2020.
[11] Government of Portugal. "Composition of the government (Composição do Governo)". [https://www.portugal.gov.pt/pt/gc21/governo/composicao]. Accessed 1 October 2020.
[12] Verification Research, Training and Information Centre (VERTIC). "Legislation Database". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/]. Accessed 21 October 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

There is some but insufficient evidence that Portugal has in place legislation or regulations related to biosecurity which address requirements such as physical containment, operation practices, failure reporting systems or cybersecurity of facilities in which especially dangerous pathogens and toxins are store or processed. The "Global Health Security Agenda Pilot Assessment of Portugal, Final report 22.6.2015" states in page 22 that Portugal has "Biosafety and biosecurity legislation and/or regulations [...] in place" and that "Legislation concerning Biosafety and biosecurity is linked to national and European legislation as for biosafety/biosecurity at workplace and protection against biological agents, but Portugal is developing a specific proposal for the implementation of an inter-ministerial biosafety-biosecurity authority." [1] The same document in the same page also notes that "A list of laws and directives can be found in the annexes and is available at the [LabPTBioNet] website." [1] In the LabPTBioNet website , there is a list of documents, guides, manuals, regulations and legislation on biosafety and biosecurity relevant to Portugal. Among the legislation and regulations, they are categorised between those pertaining health and safety at work, residues and waste, experiments on animals, biological agents, individual protective equipment, and protocols and conventions. There are no category for biosecurity and there are no specific legislation in the website that deals with biosecurity. The category "biological agents" do not contain any legislation relevant to biosecurity. [2] The only relevant document is the "Biorisk management: Laboratory biosecurity guidance" of September 2006 of the World Health Organization. The document is not a legislation or regulation. [3] The workshop "Biosecurity: the Situation in Portugal", held by the National Institute of Health (INSA) in 2012, produced a document that summarises the analysis

provided by the key attending experts. A key recommendation from the document in page 73 is for the government to implement new legislation on biosecurity, suggesting that there are no specific legislation on the issue. No further information on the recommendations were found. [5] In addition, Portugal reports to the United Nations Office at Geneva (UNOG) every year for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention. Portugal's "Confidence Building Measure Return" report does not indicate that it has in place legislation on biosecurity, although there are indications that it follows regulations. [6] There were no changes or updates relative to the 2019 report. No other evidence on the matter was found in the 2019 report. [7] No evidence was found in the VERTIC database. [8]

[1] Global Health Security Agenda. 2015. "Global Health Security Pilot Assessment of Portugal: April 12 to 17, 2015". [https://www.ebola.dgs.pt/documentos-diversos/avaliacoes-externas-documento-ghsa-pdf.aspx]. Accessed 1 October 2020.
[2] Portuguese Laboratory Network of Biosecurity. "Useful links (Línks úteis)". [http://www.labptbionet.ibmc.up.pt/node/17]. Accessed 1 October 2020.
[3] World Health Organization. September 2006. "Biorisk management: Laboratory biosecurity guidance". [https://www.who.int/csr/resources/publications/biosafety/WHO_CDS_EPR_2006_6.pdf?ua=1]. Accessed 1 October 2020.
[4] European Commission. Directive 2000/54/EC: Biological agents at work. [https://osha.europa.eu/en/legislation/directives/exposure-to-biological-agents/77]. Accessed 1 October 2020.
[5] National Institute of Health. 2012. "Workshop:Biosecurity: Situation in Portugal (Workshop: Biossegurança: Situação em Portugal)". [http://repositorio.insa.pt/bitstream/10400.18/1538/3/Workshop%20Biosseguran%C3%A7a%20-%20Situa%C3%A7%C3%A3o%20em%20Portugal.pdf]. Accessed 1 October 2020.
[6] United Nations Office at Geneva. 2020. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2020_portugal.pdf]. Accessed 1 October 2020.
[7] United Nations Office at Geneva. 2019. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2019_portugal.pdf]. Accessed 1 October 2020.
[8] Verification Research, Training and Information Centre (VERTIC). "Legislation Database". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/]. Accessed 21 October 2020.

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 that Portugal has an established agency responsible for the enforcement of biosecurity legislation and regulations. There is insufficient evidence that Portugal has biosecurity legislation or regulations. Portugal has the Portuguese Laboratory Network of Biosecurity (LabPTBionet), which acts under the Ministry of Health and is responsible for promoting best practices in laboratories when dealing with biological agents, participating in the development of norms and regulations, and establish the link with the European Biosafety Association (EBSA). [1] However, there is no evidence of biosecurity regulations or legislation that deals with the management and control of biological materials. Legislation on the matter is focused on the protection of personnel and workers that are at risk of biological agents, rather than the security of those facilities. [2] The workshop "Biosecurity: the Situation in Portugal", held by the National Institute of Health (INSA) in 2012, produced a document that summarises the analysis provided by the key attending experts. In page 51, it identifies the Coordinating Commission of Emergencies (CEE), established by Law 81 of 2009. Its responsibilities include the intervention when public health is at risk, but no mention of enforcement of biosecurity legislation or regulations are mentioned. [3] In addition, Portugal reports to the United Nations Office at Geneva (UNOG) every year for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention. The reporting includes data on Biosafety

Level (BSL) facilities, their level, location, floor area of the laboratory, types of pathogens stored and processed, the organizational structure of the facilities, etc. Portugal's "Confidence Building Measure Return" report does not indicate that it has an established agency responsible for the enforcement of biosecurity legislation or regulations. [4] There were no changes or updates relative to the 2019 report. No other evidence on the matter was found in the 2019 report. [5]

[1] Portuguese Laboratory Network of Biosecurity. "About (Sobre)". [http://www.labptbionet.ibmc.up.pt/sobre]. Accessed February 2019.
[2] Portuguese Laboratory Network of Biosecurity. "Useful links (Links Úteis)". [http://www.labptbionet.ibmc.up.pt/node/17]. Accessed February 2019.
[3] National Institute of Health. 2012. "Workshop:Biosecurity: Situation in Portugal (Workshop: Biossegurança: Situação em Portugal)". [http://repositorio.insa.pt/bitstream/10400.18/1538/3/Workshop%20Biosseguran%C3%A7a%20-%20Situa%C3%A7%C3%A3o%20em%20Portugal.pdf]. Accessed February 2019.
[4] United Nations Office at Geneva. 2020. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2020_portugal.pdf]. Accessed 1 October 2020.
[5] United Nations Office at Geneva. 2019. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2019_portugal.pdf]. Accessed 1 October 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

There is insufficient evidence that Portugal has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities. According to the Global Health Security Agenda Pilot Assessment of Portugal of 2015, "Locations for especially dangerous pathogens and toxins are consolidated in 3 main laboratories owned by the Instituto Nacional de Saude that fulfil the requirements for BSL-3." [1; page 6] However, no further evidence was found in the websites of the Portuguese Laboratory Network of Biosecurity (LabPTBionet) [2], which would be the agency responsible for keeping inventory, nor in the websites of the Ministry of Agriculture and the Ministry of National Defence. [3,4] There are no mentions of consolidating inventories of especially dangerous pathogens and toxins into a minimum number of facilities in the National Health Plan to 2020. [5] The Biosecurity Workshop document by the National Institute of Health also provides no evidence that there has been consolidation of dangerous pathogens and toxins into a minimum number of facilities. [6] In addition, Portugal reports to the United Nations Office at Geneva (UNOG) every year for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention. The reporting includes data on Biosafety Level (BSL) facilities, their level, location, floor area of the laboratory, types of pathogens stored and processed, the organizational structure of the facilities, etc. Portugal's "Confidence Building Measure Return" report does not indicate that it has in place a record of facilities with especially dangerous pathogens. As per the report covering data for 2020, Portugal has six institutions with laboratory facilities. None of them have BSL-4 laboratories; however, four of them have BSL3 laboratories and all have BSL2 laboratories. The report does not indicate what type of pathogen each of those facilities or institutions store nor if there has been any action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities. [7] There were no changes or updates relative to the 2019 report. No other evidence on the matter was found in the 2019 report. [8]

[1] Global Health Security Agenda. 2015. "Global Health Security Pilot Assessment of Portugal: April 12 to 17, 2015". [https://www.ebola.dgs.pt/documentos-diversos/avaliacoes-externas-documento-ghsa-pdf.aspx]. Accessed 1 October 2020.
[2] Portuguese Laboratory Network of Biosecurity. "About (Sobre)". [http://www.labptbionet.ibmc.up.pt/sobre]. Accessed 1

October 2020.
[3] Government of Portugal. "Agriculture, Forests and Rural Development (Agricultura, Florestas e Desenvolvimento Rural)". [https://www.portugal.gov.pt/pt/gc21/area-de-governo/agricultura-florestas-e-desenvolvimento-rural]. Accessed 1 October 2020.
[4] Ministry of National Defence. [https://www.defesa.gov.pt/pt]. Accessed 1 October 2020.
[5] General Directorate of Health. May 2015. "National Plan of Health: Revision and Extension to 2020 (Plano Nacional de Saúde: Revisão e extensão a 2020)". [http://pns.dgs.pt/files/2015/06/Plano-Nacional-de-Saude-Revisao-e-Extensao-a-2020.pdf.pdf]. Accessed 1 October 2020.
[6] National Institute of Health. 2012. "Workshop: Biosecurity: Situation in Portugal (Workshop: Biossegurança: Situação em Portugal)". [http://repositorio.insa.pt/bitstream/10400.18/1538/3/Workshop%20Biosseguran%C3%A7a%20-%20Situa%C3%A7%C3%A3o%20em%20Portugal.pdf]. Accessed 1 October 2020.
[7] United Nations Office at Geneva. 2020. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2020_portugal.pdf]. Accessed 1 October 2020.
[8] United Nations Office at Geneva. 2019. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2019_portugal.pdf]. Accessed 1 October 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

There is evidence that Portugal has in-country capacity to conduct Polymerase Chain Reaction (PCR)-based diagnostic testing for Ebola and Anthrax. An academic study by the University of Coimbra in 2015 confirms that there are PCR-based diagnostic testing for Ebola in Portugal. [1] Another study by the National Institute of Health of 2014 confirms that the country has PCR-based diagnostic testing for Anthrax in Portugal. [2]

[1] Almeida, V.F.S. September 2015. "Ebola: Integrated review and updated given the most recent epidemiological evidence (Ébola: Revisão integrada e atualizada à luz das mais recentes evidência epidemiológicas)". University of Coimbra Medical School. [https://estudogeral.uc.pt/bitstream/10316/36794/1/Tese_Vania%20Almeida.pdf]. Accessed 1 October 2020.
[2] Cordeiro, Rita, et al. 2014. "Carbuncle: a rare disease in Portugal? (Carbúnculo: uma doença rara em Portugal?)" National Institute of Health.
[http://repositorio.insa.pt/bitstream/10400.18/2344/3/Boletim_Epidemiologico_Observacoes_9_2014_artigo7.pdf]. Accessed 1 October 2020.

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

There is insufficient evidence that Portugal requires biosecurity training for personnel working in facilities housing or working with especially dangerous pathogens, toxins or biological materials with pandemic potential. The Emergency Response and Biopreparation Unit (UREB) of the Department of Infectious Diseases of the National Institute of Health (INSA) offers courses on laboratory biosafety, which are required for personnel to work in higher-risk laboratories, as the system in Portugal classifies laboratories into four categories of biosafety levels (BSL), from 1 to 4. [1] The courses currently available are displayed in the E-Learning Platform of the National Institute of Health by the Ministry of Health. However, these courses relate to biosafety and transport of infectious substances. [2] No other information was available at the Ministry of Health website. In addition, although the Portuguese Laboratory for Bio-Safety Network (Lab-PTBioNet), which covers both biosafety and biosecurity, indicates as one of its objectives to established a training plan recognized by all laboratories, there is insufficient evidence that this plan has been developed or that it has/will cover biosecurity. [7] Portugal reports to the United Nations Office at Geneva (UNOG) every year for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention. The reporting includes data on Biosafety Level (BSL) facilities, their level, location, floor area of the laboratory, types of pathogens stored and processed, the organizational structure of the facilities, etc. Portugal's "Confidence Building Measure Return" report does not confirm nor deny that biosecurity training is required of its personnel. [3] There were no changes or updates relative to the 2019 report. No other evidence on the matter was found in the 2019 report. [4] No other information was found at the Ministry of National Defence or at the Ministry of Agriculture, Forests and Rural Development websites. [5,6] No evidence was found in the VERTIC database. [7]

[1] National Institute of Health. 9 September 2016. "Course on biosecurity in laboratories levels 2 and 3 (Curso de Biossegurança em Laboratório de Nível 2 e 3)".
[http://www2.insa.pt/sites/INSA/Portugues/ComInf/Noticias/Paginas/CursobiossegurancaBSL3.aspx]. Accessed 1 October 2020.
[2] National Institute of Health. "Course categories". [https://formamais-insa.min-saude.pt/]. Accessed 1 October 2020.
[3] United Nations Office at Geneva. 2020. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2020_portugal.pdf]. Accessed 1 October 2020.
[4] United Nations Office at Geneva. 2019. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2019_portugal.pdf]. Accessed 1 October 2020.
[5] Ministry of National Defence. "Documents (Documentos)".
[https://www.defesa.gov.pt/pt/comunicacao/documentos/Paginas/default.aspx]. Accessed 1 October 2020.
[6] Ministry of Agriculture, Forests and Rural Development. "Documents (Documentos)".
[https://www.portugal.gov.pt/pt/gc21/area-de-governo/agricultura-florestas-e-desenvolvimento-rural#documentos]. Accessed 1 October 2020.
[7] Rede Laboratorial Portuguesa de Biossegurança (Lab-PTBioNet). "About (Sobre)".
[http://www.labptbionet.ibmc.up.pt/sobre]. Accessed 1 October 2020.
[7] Verification Research, Training and Information Centre (VERTIC). "Legislation Database".
[https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/]. Accessed 21 October 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

There is insufficient evidence that Portugal conducts checks on security and other personnel with access to especially dangerous pathogens, toxins, or biological materials with pandemic potential. According to the General Law on Work in Public Functions Article 36, all prospective candidates must undergo psychological evaluation, aside from exams to test their capabilities and knowledge on the subject related to the position. [1] However, there are no specific requirement for security and other personnel with access to especially dangerous pathogens, toxins, or biological materials with pandemic potential. There is no evidence that Portugal requires drug testing or background checks for personnel who would have access to especially dangerous pathogens, toxins or biological materials. However, the same law and article notes that other selection methods could be employed, but it does not specify what are those methods nor for which positions they could be applicable. [1] Details on the selection process for candidates of positions that would have access to the especially dangerous substances are not publicly available. No other information was found at the Ministry of National Defence or at the Ministry of Agriculture, Forests and Rural Development websites. [2,3,4] Portugal does not have a Ministry of Research. No other evidence was found in the VERTIC database. [5]

[1] Assembly of the Republic. General Law no. 35 of 2014 on Work in Public Functions. [http://www.pgdlisboa.pt/leis/lei_mostra_articulado.php?nid=2171&so_miolo=&tabela=leis&nversao=]. Accessed 1 October 2020.
[2] Ministry of Health. "Documents (Documentos)". [https://www.portugal.gov.pt/pt/gc21/area-de-governo/saude#documentos]. Accessed 1 October 2020.
[3] Ministry of National Defence. "Documents (Documentos)". [https://www.defesa.gov.pt/pt/comunicacao/documentos/Paginas/default.aspx]. Accessed 1 October 2020.
[4] Ministry of Agriculture, Forests and Rural Development. "Documents (Documentos)". [https://www.portugal.gov.pt/pt/gc21/area-de-governo/agricultura-florestas-e-desenvolvimento-rural#documentos]. Accessed 1 October 2020.
[5] Verification Research, Training and Information Centre (VERTIC). "Legislation Database". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/]. Accessed 20 October 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 evidence that there are regulations on safe and secure transport of infectious substances and they explicitly mention categories A or B. Decree-Law 41-A of 29 April 2010 regulates the transportation of dangerous materials. In page 177 of the Decree-Law, section 2.2.62.1.4, the document provides definitions and examples of substances that would fall under categories A and B. The document extensively details transportation regulations for those substances. [1]

[1] Government of Portugal. Decree-Law 41-A of 29 April 2010. [https://dre.pt/application/dir/pdf1sdip/2010/04/08301/0000201972.pdf]. Accessed 1 October 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

There is evidence that Portugal has legislation and regulation in place to oversee the cross-border transfer and end-user screening of especially dangerous pathogens, toxins and pathogens with pandemic potential. The Post of Portugal (CTT) has clear regulations on the prohibition of transporting toxic and infectious substances, including cross-border transfer. The regulations are based on the General Regulations of the Universal Postal Union. [1] In addition, according to the "Global Health Security Agenda Pilot Assessment of Portugal, Final report 22.6.2015" in page 39, "National Operational Guidelines (October 2010) for CBRN [chemical, biological, radiological and nuclear] events (independent of whether they are natural, accidental or intentional) provide the operational framework for intersectoral collaboration at the national and local levels". [2] The National Operation Guidelines of October 2010 deals with CBRN and it has specific measures to deal with biological threats, including the transfer of especially dangerous pathogens, toxins and pathogens with pandemic potential in page 47. [3] Furthermore, decree-law number 226 of 2006 approves regulation number 725 of 2004 of the European Parliamente and European Council, which establishes regulations on the security of ports. This regulation outlines the process to deal in the cross-border ports of entry of dangerous substances, which include pathogens, toxins and pathogens with pandemic potential. The process also includes end-user screening mechanisms. Sections 9.33 and 9.34 on the Delivery of ship's stores specifically mention that there are mechanisms to "Prevent ship's stores from being accepted unless", as well as procedures involving "the port facility covering notification and timing of deliveries and their documentation". [4] Portugal reports to the United Nations Office at Geneva (UNOG) every year for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention. The reporting includes data on Biosafety Level (BSL) facilities, their level, location, floor area of the laboratory, types of pathogens stored and processed, the organizational structure of the facilities, etc. Portugal's "Confidence Building Measure Return" report does not mention if Portugal has regulations on cross-border transfer or end-user screening of especially dangerous pathogens, toxins and pathogens with pandemic potential. [5] There were no changes or updates relative to the 2019 report. No other evidence on the matter was found in the 2019 report. [6] 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 Portugal. [7]

[1] CTT. "Prohibitions and restrictions (Proibições e restrições)". [https://www.ctt.pt/particulares/enviar/regras-cuidados-envios/proibicoes-restricoes]. Accessed 1 October 2020.
[2] Global Health Security Agenda. 2015. "Global Health Security Pilot Assessment of Portugal: April 12 to 17, 2015". [https://www.ebola.dgs.pt/documentos-diversos/avaliacoes-externas-documento-ghsa-pdf.aspx]. Accessed 1 October 2020.
[3] National Authority of Civil Protection. October 2010. "National Operational Guidelines no. 3 - CBRN (Directiva Operacional Nacional no. 3 - NRBQ)". [http://www.prociv.pt/bk/PROTECAOCIVIL/LEGISLACAONORMATIVOS/Directivas/ANPC_DON-3_NRBQ.pdf]. Accessed 1 October 2020.
[4] Government of Portugal. Decree-law number 226 of 2006. [https://dre.pt/pesquisa/-/search/544783/details/maximized]. Accessed 1 October 2020.
[5] United Nations Office at Geneva. 2020. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2020_portugal.pdf]. Accessed 1 October 2020.
[6] United Nations Office at Geneva. 2019. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2019_portugal.pdf]. Accessed 1 October 2020.
[7] 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

There is evidence that Portugal has in place national biosafety legislation. The Decree-Law number 84 of 1997 places regulations on biosafety for workers at risk of exposure to biological agents. The documents places a mechanism to classify the various types of biological agents, provides actions to reduce risk of exposure to biological agents, and monitors workers' health. Other specific measures include the vaccination of workers in Article 13, basic hygiene and individual protective measures such as providing proper clothing and equipment in Article 12, and establishing guidelines for laboratory safety in Article 15. [1] Portugal reports to the United Nations Office at Geneva (UNOG) every year for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention. The reporting includes data on Biosafety Level (BSL) facilities, their level, location, floor area of the laboratory, types of pathogens stored and processed, the organizational structure of the facilities, etc. Portugal's "Confidence Building Measure Return" report does not mention if Portugal has regulations on biosafety. [2] There were no changes or updates relative to the 2019 report. No other evidence on the matter was found in the 2019 report. [3]

[1] Ministry of Labour. Decree-Law number 84 of 1997.
[https://dre.pt/application/dir/pdf1s/1997/04/089A00/17021709.pdf]. Accessed February 2019.
[2] United Nations Office at Geneva. 2020. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2020_portugal.pdf]. Accessed 1 October 2020.
[3] United Nations Office at Geneva. 2019. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2019_portugal.pdf]. Accessed 1 October 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

There is sufficient evidence that Portugal has an established agency responsible for the enforcement of biosafety legislation and regulations. According to decree-law 84 of 1997, the Institute of Development and Inspection of Work Conditions (IDICT) is responsible for enforcing biosafety legislation. [1] All employers (i.e. laboratories in this context) must submit to the IDICT any new facilities and be subject to inspection, according to Article 5. [1] Furthermore, the Portuguese Laboratory Network of Biosecurity (Lab-PTBioNet) is the responsible agency for issues regarding biosafety and biosecurity in Portugal. The enforcement of biosafety legislation (decree-law 84 of 1997) is not explicitly Lab-PTBioNet's responsibilities; however, it is responsible for other facets that contribute to the enforcement of law. Among its objectives is to promote best practices in laboratories that manipulate biological agents, participate in the development of norms and procedures, and establishing a plan for biosecurity and biosafety in Portugal. [2] Portugal reports to the United Nations Office at Geneva (UNOG) every year

for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention. The reporting includes data on Biosafety Level (BSL) facilities, their level, location, floor area of the laboratory, types of pathogens stored and processed, the organizational structure of the facilities, etc. Portugal's "Confidence Building Measure Return" report does not mention if Portugal has regulations on biosafety or the agency responsible for enforcement of biosafety legislation. [3] There were no changes or updates relative to the 2019 report. No other evidence on the matter was found in the 2019 report. [4]

[1] Ministry of Labour. Decree-Law number 84 of 1997.
[https://dre.pt/application/dir/pdf1s/1997/04/089A00/17021709.pdf]. Accessed 2 October 2020.
[2] Portuguese Laboratory Network of Biosecurity. "About (Sobre)". [http://www.labptbionet.ibmc.up.pt/sobre]. Accessed 2 October 2020.
[3] United Nations Office at Geneva. 2020. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2020_portugal.pdf]. Accessed 2 October 2020.
[4] United Nations Office at Geneva. 2019. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2019_portugal.pdf]. Accessed 2 October 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

There is insufficient evidence that Portugal requires biosafety training, using a standardised, required approach, such as through a common curriculum or a train-the-trainer program, for personnel working in facilities housing or working with especially dangerous pathogens, toxins, or biological materials with pandemic potential. The Emergency Response and Biopreparation Unit (UREB) of the Department of Infectious Diseases of the National Institute of Health (INSA) offers courses on laboratory biosafety, which are required for personnel to work in higher-risk laboratories, as the system in Portugal classifies laboratories into four categories of biosafety levels (BSL), from 1 to 4. [1] The courses currently available are displayed in the E-Learning Platform of the National Institute of Health by the Ministry of Health. [2] No other information was available at the Ministry of Health website. Portugal requires biosafety safety training by law; however, it makes no mention of a standardised curriculum. According to Decree-Law number 84 of 1997 Article 17, training must be provided to workers who face risks related to biological agents periodically. The training must include topics such as: potential health risks, precautions to prevent risk exposure, norms for hygiene, equipment use and protection clothing, and the necessary measures to take in cases of incidents and precaution measures. [3] According to the Portuguese Laboratory Network of Biosecurity (Lab-PTBioNet), the National Institute of Health (INSA) makes available a course programme on biosecurity. However, at the time of research, the link to the course programme was unreachable. [4] Portugal reports to the United Nations Office at Geneva (UNOG) every year for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention. The reporting includes data on Biosafety Level (BSL) facilities, their level, location, floor area of the laboratory, types of pathogens stored and processed, the organizational structure of the facilities, etc. Portugal's "Confidence Building Measure Return" report does not mention if Portugal has a requirement for standardised training. [5] There were no changes or updates relative to the 2019 report. No other evidence on the matter was found in the 2019 report. [6]

[1] National Institute of Health. 9 September 2016. "Course on biosecurity in laboratories levels 2 and 3 (Curso de Biossegurança em Laboratório de Nível 2 e 3)". [http://www2.insa.pt/sites/INSA/Portugues/ComInf/Noticias/Paginas/CursobiosseguranCaBSL3.aspx]. Accessed 2 October 2020.
[2] National Institute of Health. "Course categories". [https://formamais-insa.min-saude.pt/]. Accessed 2 October 2020.
[3] Ministry of Labour. Decree-Law number 84 of 1997. [https://dre.pt/application/dir/pdf1s/1997/04/089A00/17021709.pdf]. Accessed 2 October 2020.
[4] Portuguese Laboratory Network of Biosecurity. "Formation (Formação)". [http://www.labptbionet.ibmc.up.pt/node/16]. Accessed 2 October 2020.
[5] United Nations Office at Geneva. 2020. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2020_portugal.pdf]. Accessed 2 October 2020.
[6] United Nations Office at Geneva. 2019. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2019_portugal.pdf]. Accessed 2 October 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

No evidence has been found that Portugal has conducted an assessment to determine whether ongoing research is occurring on especially dangerous pathogens, toxins, pathogens with pandemic potential or dual-use research. The National Academy of Sciences of the US published the article "Gaps in the International Governance of Dual-Use Research of Concern". The article states that there are no specific national law, regulations or guidance on dual-research use in Portugal. Indeed, in page 11, "In Portugal DURC [dual-use research of concern] is related to the biosecurity committees within institutions and informal bottom-up awareness-raising activities." [1] The article further adds in page 13: "The expert from Portugal highlighted 'a big gap of knowledge about the concept of DURC'". [1] However, there is a law in Portugal that deals with dual-use equipment and products. Decree-Law number 130 of 2015 specifically deals with equipment and products that have dual use and the issue of weapons of mass destruction is particularly noted. No mention of dual-use research was found in this law. [2] There is no information on the issue in websites of the Ministry of Health, National Institute of Health, Portuguese Laboratory Network of Biosecurity, Ministry of National Defence, and Ministry of Agriculture, Forests and Rural Development. [3][4][5][6][7]Portugal does not have a Ministry of Research. Portugal reports to the United Nations Office at Geneva (UNOG) every year for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention. The reporting includes data on Biosafety Level (BSL) facilities, their level, location, floor area of the laboratory, types of pathogens stored and processed, the organizational structure of the facilities, etc. Portugal's "Confidence Building Measure Return" report does not mention if Portugal conducts assessments of ongoing research. [8] There were no changes or updates relative to the 2019 report. No other evidence on the matter was found in the 2019 report. [9] No other evidence was found in the VERTIC database. [10]

[1] Millett, P.D. National Academy of Sciences (US). 17 January 2017. "Gaps in the International Governance of Dual-Use Research of Concern". [https://sites.nationalacademies.org/cs/groups/pgasite/documents/webpage/pga_176434.pdf].

Accessed 2 October 2020.
[2] Ministry of Finance. Decree Law number 130 of 2015. [https://dre.pt/web/guest/pesquisa/-/search/69773247/details/maximized]. Accessed 2 October 2020.
[3] Minsitry of Health. "Health research (Investigações em saúde". [https://www.sns.gov.pt/institucional/investigacao-em-saude-2/]. Accessed 2 October 2020.
[4] National Institute of Health. "Mission and attributions (Missão e atribuições)". [http://www.insa.min-saude.pt/category/institucional/missao-e-atribuicoes/]. Accessed 2 October 2020.
[5] Portuguese Laboratory Network of Biosecurity. "About (Sobre)". [http://www.labptbionet.ibmc.up.pt/sobre]. Accessed 2 October 2020.
[6] Ministry of National Defence. "Organization (Organização)". [https://www.defesa.gov.pt/pt/defesa/organizacao]. Accessed 2 October 2020.
[7] Government of Portugal. "Agriculture, Forests and Rural Development (Agricultura, Florestas e Desenvolvimento Rural)". [https://www.portugal.gov.pt/pt/gc21/area-de-governo/agricultura-florestas-e-desenvolvimento-rural]. Accessed 2 October 2020.
[8] United Nations Office at Geneva. 2020. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2020_portugal.pdf]. Accessed 2 October 2020.
[9] United Nations Office at Geneva. 2019. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2019_portugal.pdf]. Accessed 2 October 2020.
[10] Verification Research, Training and Information Centre (VERTIC). "Legislation Database". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/]. Accessed 20 October 2020.

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 evidence that there is a national policy requiring oversight of dual-use research in Portugal. The National Academy of Sciences of the US published the article "Gaps in the International Governance of Dual-Use Research of Concern". The article states that there are no specific national law, regulations or guidance on dual-research use in Portugal. Indeed, "In Portugal DURC [dual-use research of concern] is related to the biosecurity committees within institutions and informal bottom-up awareness-raising activities." [1; page 11] The article further adds: "The expert from Portugal highlighted 'a big gap of knowledge about the concept of DURC'". [1; page 13] However, there is a law in Portugal that deals with dual-use equipment and products. Decree-Law number 130 of 2015 specifically deals with equipment and products that have dual use and the issue of weapons of mass destruction is particularly noted. No mention of dual-use research was found in this law. [2] There is no information on the issue in websites of the Ministry of Health, National Institute of Health, Portuguese Laboratory Network of Biosecurity, Ministry of National Defence, and Ministry of Agriculture, Forests and Rural Development. [3][4][5][6][7]Portugal does not have a Ministry of Research. Portugal reports to the United Nations Office at Geneva (UNOG) every year for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention. The reporting includes data on Biosafety Level (BSL) facilities, their level, location, floor area of the laboratory, types of pathogens stored and processed, the organizational structure of the facilities, etc. Portugal's "Confidence Building Measure Return" report does not mention if Portugal conducts assessments of ongoing research. [8] There were no changes or updates relative to the 2019 report. No other evidence on the matter was found in the 2019 report. [9] No other evidence was found in the VERTIC database. [10]

[1] Millett, P.D. National Academy of Sciences (US). 17 January 2017. "Gaps in the International Governance of Dual-Use Research of Concern". [https://sites.nationalacademies.org/cs/groups/pgasite/documents/webpage/pga_176434.pdf]. Accessed 2 October 2020.
[2] Ministry of Finance. Decree Law number 130 of 2015. [https://dre.pt/web/guest/pesquisa/-/search/69773247/details/maximized]. Accessed 2 October 2020.
[3] Minsitry of Health. "Health research (Investigações em saúde". [https://www.sns.gov.pt/institucional/investigacao-em-saude-2/]. Accessed 2 October 2020.
[4] National Institute of Health. "Mission and attributions (Missão e atribuições)". [http://www.insa.min-saude.pt/category/institucional/missao-e-atribuicoes/]. Accessed 2 October 2020.
[5] Portuguese Laboratory Network of Biosecurity. "About (Sobre)". [http://www.labptbionet.ibmc.up.pt/sobre]. Accessed 2 October 2020.
[6] Ministry of National Defence. "Organization (Organização)". [https://www.defesa.gov.pt/pt/defesa/organizacao]. Accessed 2 October 2020.
[7] Government of Portugal. "Agriculture, Forests and Rural Development (Agricultura, Florestas e Desenvolvimento Rural)". [https://www.portugal.gov.pt/pt/gc21/area-de-governo/agricultura-florestas-e-desenvolvimento-rural]. Accessed 2 October 2020.
[8] United Nations Office at Geneva. 2020. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2020_portugal.pdf]. Accessed 2 October 2020.
[9] United Nations Office at Geneva. 2019. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2019_portugal.pdf]. Accessed 2 October 2020.
[10] Verification Research, Training and Information Centre (VERTIC). "Legislation Database". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/]. Accessed 20 October 2020.

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

There is insufficient evidence that there is an agency responsible for oversight of research with especially dangerous pathogens, pathogens with pandemic potential or dual-use research. The National Academy of Sciences of the US published the article "Gaps in the International Governance of Dual-Use Research of Concern". The article states that there are no specific national law, regulations or guidance on dual-research use in Portugal. Indeed, in page 11, "In Portugal DURC [dual-use research of concern] is related to the biosecurity committees within institutions and informal bottom-up awareness-raising activities." [1] However, no evidence was found that a biosecurity committee exists. The Biosecurity Workshop hosted by the National Institute of Health (INSA) notes in page 8 that there is a proposal to create a Biosecurity Commission, but no evidence has been found that it exists. [2] There is no information on the issue in websites of the Ministry of Health, National Institute of Health, Portuguese Laboratory Network of Biosecurity, Ministry of National Defence, and Ministry of Agriculture, Forests and Rural Development. [3][4][5][6][7]Portugal does not have a Ministry of Research. Portugal reports to the United Nations Office at Geneva (UNOG) every year for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention. The reporting includes data on Biosafety Level (BSL) facilities, their level, location, floor area of the laboratory, types of pathogens stored and processed, the organizational structure of the facilities, etc. Portugal's "Confidence Building Measure Return" report does not mention if Portugal conducts assessments of ongoing research. [8] There were no changes or updates relative to the 2019 report. No other evidence on the matter was found in

the 2019 report. [9] No other evidence was found in the VERTIC database. [10]

[1] Millett, P.D. National Academy of Sciences (US). 17 January 2017. "Gaps in the International Governance of Dual-Use Research of Concern". [https://sites.nationalacademies.org/cs/groups/pgasite/documents/webpage/pga_176434.pdf]. Accessed 2 October 2020.
[2] National Institute of Health. 2012. "Workshop: Biossegurança: Situação em Portugal". [http://repositorio.insa.pt/bitstream/10400.18/1538/3/Workshop%20Biosseguran%C3%A7a%20-%20Situa%C3%A7%C3%A3o%20em%20Portugal.pdf]. Accessed 2 October 2020.
[3] Ministry of Health. "Health research (Investigações em saúde". [https://www.sns.gov.pt/institucional/investigacao-em-saude-2/]. Accessed 2 October 2020.
[4] National Institute of Health. "Mission and attributions (Missão e atribuições)". [http://www.insa.min-saude.pt/category/institucional/missao-e-atribuicoes/]. Accessed 2 October 2020.
[5] Portuguese Laboratory Network of Biosecurity. "About (Sobre)". [http://www.labptbionet.ibmc.up.pt/sobre]. Accessed 2 October 2020.
[6] Ministry of National Defence. "Organization (Organização)". [https://www.defesa.gov.pt/pt/defesa/organizacao]. Accessed 2 October 2020.
[7] Government of Portugal. "Agriculture, Forests and Rural Development (Agricultura, Florestas e Desenvolvimento Rural)". [https://www.portugal.gov.pt/pt/gc21/area-de-governo/agricultura-florestas-e-desenvolvimento-rural]. Accessed 2 October 2020.
[8] United Nations Office at Geneva. 2020. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2020_portugal.pdf]. Accessed 2 October 2020.
[9] United Nations Office at Geneva. 2019. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2019_portugal.pdf]. Accessed 2 October 2020.
[10] Verification Research, Training and Information Centre (VERTIC). "Legislation Database". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/]. Accessed 20 October 2020.

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

Although Portugal has legislation and regulations requiring the screening of synthesised DNA before it is sold, there is no mention of a requirement that the code passes through a screener/code reader which looks for dangerous sequences before sale is authorized. Portugal is under EU directives in terms of regulations involving genetically-modified organisms (GMOs) and—indirectly—synthesised DNA. Directive number 18 of 2001 by the European Commission on the deliberate release into the environment of GMO was adopted in Portugal via Decree-Law number 72 of 2003. [1][2] Article 4 of the Directive clearly states: "Member States shall ensure that the competent authority organises inspections and other control measures as appropriate, to ensure compliance with this Directive. In the event of a release of GMO(s) or placing on the market as or in products for which no authorization was given, the Member State concerned shall ensure that necessary measures are taken to terminate the release or placing on the market, to initiate remedial action if necessary, and to inform its public, the Commission and other Member States". The regulation does not make any mention of requirement that code passes through a screener/code reader which looks for dangerous sequences before sale is authorized. [1] The Directive does not

specifically mention synthesised DNA or biology; however, according to the EU and academic articles, synthetic DNA and synthetic biology is covered by the directive on GMOs. [3][4] The EU directive and the national decree-law both define GMOs to include plant and non-plant life (except for human beings) and are inclusive of DNA. According to Article 2 of the directive: "'genetically modified organism (GMO)' means an organism, with the exception of human beings, in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination". [1] Both documents also recognize GMOs' potential harm to human as they could be pathogens, as per Annex II on the Principles for the Environmental Risk Assessment. [1] Portugal reports to the United Nations Office at Geneva (UNOG) every year for the "Confidence Building Measure Return", which is a reporting mechanism set by the Biological Weapons Convention. The reporting includes data on Biosafety Level (BSL) facilities, their level, location, floor area of the laboratory, types of pathogens stored and processed, the organizational structure of the facilities, etc. Portugal's "Confidence Building Measure Return" report does not mention synthesised DNA. [5] There were no changes or updates relative to the 2019 report. No other evidence on the matter was found in the 2019 report. [6] No other evidence was found in the VERTIC database. [7]

[1] European Parliament. Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms and repealing Council Directive 90/220/EEC - Commission Declaration. [https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32001L0018]. Accessed February 2019.
[2] Ministry of Cities, Territorial Order and Environment. Decree-Law number 72 of 2003. [https://www.apambiente.pt/_zdata/Politicas/OGM/DL_72_2003.pdf]. Accessed February 2019.
[3] European Commission. September 2016. "Future brief: Synthetic biology and biodiversity". [http://ec.europa.eu/environment/integration/research/newsalert/pdf/synthetic_biology_biodiversity_FB15_en.pdf]. Accessed February 2019.
[4] Bar-Yam, S., et al. 10 January 2012. "The regulation of synthetic biology: A guide to United States and European Union regulations, rules and guidelines". [http://biotechbenefits.croplife.org/paper/the-regulation-of-synthetic-biology-a-guide-to-u-s-european-union-regulations-rules-andguidellines/]. Accessed February 2019.
[5] United Nations Office at Geneva. 2020. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2020_portugal.pdf]. Accessed 2 October 2020.
[6] United Nations Office at Geneva. 2019. "Revised forms for the submission of the Confidence-Building Measures: Portugal". [https://bwc-ecbm.unog.ch/system/files/form-pdf/bwc_cbm_2019_portugal.pdf]. Accessed 2 October 2020.
[7] Verification Research, Training and Information Centre (VERTIC). "Legislation Database". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/]. Accessed 20 October 2020.

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: 2

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 Portugal's national laboratory system is capable of conducting diagnostic tests for 6 of the 10 WHO core tests. There is no evidence that Portugal has defined four country-specific tests. Evidence has been found that the National Institute of Health (INSA) is capable to conduct polymerase chain reaction (PCR) testing for Influenza virus (flu); virus culture for poliovirus (polio); serology for HIV; microscopy for mycobacterium tuberculosis (tuberculosis/TB); rapid diagnostic testing for plasmodium spp. (malaria); and bacterial culture for Salmonella enteritidis serotype Typhi (typhoid). [1][2][3][4][5][6] There are official articles in Portugal that confirm the World Health Organization definition of the core tests; however, there is no mention of Portugal creating its own list of country-specific tests. [7] No other information was found in the website of the Ministry of Health and the National Institute of Health. [8][9]

[1] Pechirra, P., et al. National Institute of Health. 2014. "Differential diagnosis of respiratory viruses in cases of flu syndrome in the winter 2013/2014 (Diagnóstico diferencial de vírus respiratórios em casos de síndroma gripal no inverno 2013/2014)". [http://repositorio.insa.pt/bitstream/10400.18/2287/3/observacoesNEspecial3-2014_artigo1.pdf]. Accessed 2 October 2020.
[2] Directorate-General of Health. November 2013. "National Programme for the Eradication of Polio - Plan of Action Post-Elimination (Programa Nacional de Erradicação da Poliomielite - Plano de Ação Pós-Eliminação)". [https://www.dgs.pt/documentos-em-discussao-publica/discussao-publica-da-atualizacao-do-programa-nacional-de-erradicacao-da-poliomielite-pdf.aspx]. Accessed 2 October 2020.
[3] National Institute of Health. "National Serology Survey 2015-2016 (Inquérito Serológico Nacional 2015-2016)". [http://www2.insa.pt/sites/INSA/Portugues/AreasCientificas/DoencasInfecciosas/Paginas/ISN2015-2016.aspx]. Accessed 2 October 2020.

[4] Macedo, R., et al. National Institute of Health. 2012. "Laboratory surveilalnce of tuberculosis in Portugal: Report 2012 (Vigilância Laboratorial da Tuberculose em Portugal: Relatório 2012)". [http://repositorio.insa.pt/bitstream/10400.18/1881/6/Vigilancia_Laboratorial_da_Tuberculose_em_Portugal-Relatorio_2012.pdf]. Accessed 2 October 2020.
[5] General Directorate of Health. 17 May 2017. "Guidelines: Malaria or Paludism (Orientação: Malária ou Paludismo)". [https://www.dgs.pt/directrizes-da-dgs/orientacoes-e-circulares-informativas/orientacao-n0082017-de-17052017-pdf.aspx]. Accessed 2 October 2020.
[6] Silveira, L., et al. National Institute of Health. 2018. "Phenotypical characterisation of Salmonella enterica isolates received by INSA between 2014 and 2017 (Caracterização fenotípica de isolados de Salmonella enterica recebidos no INSA entre 2014 e 2017)". [http://repositorio.insa.pt/bitstream/10400.18/5592/1/Boletim_Epidemiologico_Observacoes_N22_2018_artigo11.pdf]. Accessed 2 October 2020.
[7] Order of Pharmacists. 14 June 2018. "WHO divulges list of essential diagnotic tests (OMS divulga lista de testes de diagnósticos essenciais)". [https://www.ordemfarmaceuticos.pt/pt/noticias/oms-divulga-lista-de-testes-de-diagnosticos-essenciais/]. Accessed 2 October 2020.
[8] Ministry of Health. "Reference centres (Centros de Referência". [https://www.sns.gov.pt/institucional/centros-de-referencia/]. Accessed 2 October 2020.
[9] National Institute of Health. "Infectious diseases (Doenças Infeciosas)". [http://www.insa.min-saude.pt/category/areas-de-atuacao/doencas-infeciosas/]. Accessed 2 October 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

There is sufficient evidence that Portugal has a plan, albeit not being an overarching plan, that includes conducting testing during a public health emergency, which has considerations for testing for scaling capacity, and defining goals for testing.

While there are no mentions of novel or unknown pathogens in the National Plan of Health, the National Plan for Preparation and Response to the Disease caused by the New Coronavirus of 2020 has considerations for scaling capacity and specific guidance for testing. [1][2] On pages 11-15, the COVID-19 Plan has detailed guidance on identifying potential risks and cases as well as measures to test and trace cases. It outlines specific measures such as contact tracing, active search for cases, surveillance, testing and monitoring, based on phases defined by the gravity of the crises at a specific moment. For testing, it considers the availability of tests, prioritization of tests given supply of tests and risks of cases, as well as collaboration of partner laboratories to be able to scale up testing if necessary. [2]

[1] General Directorate of Health. May 2015. "National Plan of Health: Revision and Extension to 2020 (Plano Nacional de Saúde: Revisão e extensão a 2020)". [http://pns.dgs.pt/files/2015/06/Plano-Nacional-de-Saude-Revisao-e-Extensao-a-2020.pdf.pdf]. Accessed 4 October 2020.
[2] General Directorate of Health. March 2020. "National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19) (Plano Nacional de Preparação e Resposta à Doença por novo coronavírus (COVID-19))". [https://covid19.min-saude.pt/wp-content/uploads/2020/03/Plano-de-Conting%C3%AAncia-Novo-Coronavirus_Covid-

19.pdf]. Accessed 7 April 2021.

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 Institute of Health (INSA) and its Department of Infectious Diseases has a medical laboratory that is accredited. [1] Its clinical laboratory in Lisbon has ISO 15189:2007 accreditation. [2] In addition, its testing laboratory in Lisbon has ISO 17025:2005 accreditation. [3] This evidence is supported by the Global Health Security Pilot Assessment of Portugal, which confirms that the INSA and the National Institute of Agriculture and Veterinary Research (INIAV) "have accredited part of the methods they perform (ISO 15189)". [4; page 27]

[1] National Institute of Health. "Quality (Qualidade)".
[http://www2.insa.pt/sites/INSA/Portugues/QuemSomos/Paginas/PoliticaQualidade.aspx]. Accessed 2 October 2020.
[2] National Institute of Health. "Accreditation Annex Number E0014-1".
[http://www2.insa.pt/sites/INSA/Portugues/QuemSomos/Documents/DDI_E0014A1_2014-04-17.pdf]. Accessed 21 October 2020.
[3] National Institute of Health. "Accreditation Annex Number L0425-1".
[http://www2.insa.pt/sites/INSA/Portugues/QuemSomos/Documents/DDI_L0425A1_2014-04-17.pdf]. Accessed 21 October 2020.
[4] Global Health Security Agenda. 2015. "Global Health Security Pilot Assessment of Portugal: April 12 to 17, 2015".
[https://www.ebola.dgs.pt/documentos-diversos/avaliacoes-externas-documento-ghsa-pdf.aspx]. Accessed 2 October 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

There is sufficient evidence that Portugal's reference facilities are subject to external quality assurance review. Portugal's laboratories that serve as reference facilities are accredited with ISO 15189 and ISO 17025. [1] The accreditations suggest that they are subject to external quality assurance review. The National Institute of Health (INSA) and its Department of Infectious Diseases has a medical laboratory that is accredited. [1] Its clinical laboratory in Lisbon has ISO 15189:2007 accreditation. [2] In addition, its testing laboratory in Lisbon has ISO 17025:2005 accreditation. [3]

[1] National Institute of Health. "Qualidade".
[http://www2.insa.pt/sites/INSA/Portugues/QuemSomos/Paginas/PoliticaQualidade.aspx]. Accessed 2 October 2020.
[2] National Institute of Health. "Accreditation Annex Number E0014-1".
[http://www2.insa.pt/sites/INSA/Portugues/QuemSomos/Documents/DDI_E0014A1_2014-04-17.pdf]. Accessed 21 October 2020.
[3] National Institute of Health. "Accreditation Annex Number L0425-1".
[http://www2.insa.pt/sites/INSA/Portugues/QuemSomos/Documents/DDI_L0425A1_2014-04-17.pdf]. Accessed 21 October

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 insufficient evidence that Portugal has a specimen transport system. There are articles by the National Institute of Health (INSA) that showcases training programmes on transportation of infectious substances and specimen in Cape Verde, which suggests that Portugal has a transportation system in place. [1] However, no further evidence was found that a nationwide transportation system exists. Indeed, in a document published by INSA on its Quality External Evaluation Programme (PNAEQ) in February 2014, in page 52, a SWOT analysis is provided, and it lists as one of its weaknesses logistics (transportation). [2] No further information on the issue was found in the websites of the Ministry of Health, the National Institute of Health and the Ministry of Agriculture, Forests and Rural Development. [3][4][5]

[1] National Institute of Health. 29 July 2016. "Instituto Ricardo Jorge dá formação em Cabo Verde sobre biossegurança, transporte de material biológico e diagnóstico laboratorial". [http://www2.insa.pt/sites/INSA/Portugues/ComInf/Noticias/Paginas/CaboVerdeformacao.aspx]. Accessed 2 October 2020.
[2] National Institute of Health. February 2014. "Programme of External Quality Evaluation (Programa de Avaliação Externa da Qualidade)". [http://repositorio.insa.pt/bitstream/10400.18/2243/1/Apresenta%C3%A7%C3%A3o%20PNAEQ_Fev%202014.pdf]. Accessed 2 October 2020.
[3] Ministry of Health. "Ministry of Health (Ministério da Saúde". [https://www.sns.gov.pt/institucional/ministerio-da-saude/]. Accessed 2 October 2020.
[4] National Institute of Health. "Mission and attributions (Missão e atribuições)". [http://www.insa.min-saude.pt/category/institucional/missao-e-atribuicoes/]. Accessed 2 October 2020.
[5] Government of Portugal. "Agriculture, Forests and Rural Development (Agricultura, Florestas e Desenvolvimento Rural)". [https://www.portugal.gov.pt/pt/gc21/area-de-governo/agricultura-florestas-e-desenvolvimento-rural]. Accessed 2 October 2020.

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: 0

There is insufficient evidence that Portugal 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. There are no mentions of such mechanism in the National Plan of Health that is valid until 2020. [1] The new National Plan of Health is currently being developed and there is no estimated date for when it will be released. [2] The National Plan for Preparation and Response to

the Disease caused by the New Coronavirus created in 2020 to combat the COVID-19 pandemic does not include a mechanism to rapidly authorize or license laboratories to supplement the capacity of the national public health laboratory system to scale-up testing. The Plan outlines an order for laboratories that will be activated as the national public health laboratory system receives samples for diagnostics; however, there is no mechanism authorize or license laboratories outside the system. [3] No other evidence was found in the websites of General Directorate of Health, the National Service of Health, the National Insitute of Health, or the General Directorate of Food and Veterinary. [4,5,6,7]

[1] General Directorate of Health. May 2015. "National Plan of Health: Revision and Extension to 2020 (Plano Nacional de Saúde: Revisão e extensão a 2020)". [http://pns.dgs.pt/files/2015/06/Plano-Nacional-de-Saude-Revisao-e-Extensao-a-2020.pdf.pdf]. Accessed 4 October 2020.
[2] General Directorate of Health. "National Health Plan (Plano Nacional de Saúde)". [https://pns.dgs.pt/]. Accessed 4 October 2020.
[3] General Directorate of Health. March 2020. "National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19) (Plano Nacional de Preparação e Resposta à Doença por novo coronavírus (COVID-19))". [https://covid19.min-saude.pt/wp-content/uploads/2020/03/Plano-de-Conting%C3%AAncia-Novo-Coronavirus_Covid-19.pdf]. Accessed 4 October 2020.
[4] General Directorate of Health website. [https://www.dgs.pt/]. Accessed 4 October 2020.
[5] National Service of Health website. [https://www.sns.gov.pt/]. Accessed 4 October 2020.
[6] National Insitute of Health. "Investigation and Development (Investigação e Desenvolvimento)". [http://www2.insa.pt/sites/INSA/Portugues/AreasCientificas/Epidemiologia/Paginas/InvestigacaoDesenvolvimento.aspx]. Accessed 4 October 2020.
[7] General Directorate of Food and Veterinary website. [http://www.dgv.min-agricultura.pt/portal/page/portal/DGV]. Accessed 4 October 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

There is sufficient evidence that Portugal is conducting ongoing event-based surveillance of various sources and analysis for infectious disease on a daily, real-time basis. The Centre for Public Health Emergencies (CESP) under the General Directorate of Health is responsible for epidemiological surveillance and has the objective of monitoring, evaluating and managing public health emergency events. [1] The CESP allows real-time information on disease reporting through the SINAVE platform (national epidemiological surveillance system) which, "integrated with the monitoring of events through specific tools for the early detection of phenomena of a diverse nature, can cover all the components of public health surveillance: indicator-based surveillance and event-based surveillance (EBS)". As part of EBS, the CESP undertakes "Monitoring of different sources of information and management of electronic tools" as well as "identification and analysis of signals and alerts". The CESP monitors different types of sources of health information, not only from sentinel sites, to obtain intelligence on any potential public health threat. This is done on a daily and real-time basis. [1]

[1] National Service of Health. "Centre for Public Health Emergencies (Centro de Emergências em Saúde Pública)". [https://www.sns.gov.pt/sns/centro-de-emergencias-em-saude-publica/]. Accessed 2 October 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: 0

There is insufficient evidence that Portugal reported a potential public health emergency of international concern (PHEIC) to the WHO in the last two years.

The WHO declared a PHEIC over COVID-19 on 30 January 2020. The first confirmed case in Portugal appeared on 2 March 2020 and there is no evidence that Portugal informed the WGO that there might be a potential PHEIC. [1] Portugal entered state of alert over the pandemic on 13 March 2020. [2] The WHO Health Emergency Dashboard affirms that Portugal is undergoing one event for COVID-19. A specific date is not provided for when it was reported, but it notes that it is for 2020. [3] The WHO's Disease Outbreak News does not list COVID-19 in the Portugal page. The last reported incident in WHO's Disease Outbreak News was on 7 June 2017, over two years ago, for Hepatitis A outbreaks mostly affecting men who have sex with men. This case was not limited to Portugal but to the entire European region and the Americas. The last Portugal-specific case was reported on 17 September 2015, for the West Nile Virus. [4]

[1] World Health Organization. "Portugal". [https://covid19.who.int/region/euro/country/pt]. Accessed 21 October 2020.
[2] Teixeira, Alberto. Sapo. 18 March 2020. "Alertness, calamity or emergency. What does each one foresee? (Estado de alerta, calamidade ou emergência. O que prevê cada um?)". [https://eco.sapo.pt/2020/03/18/estado-de-alerta-calamidade-ou-emergencia-o-que-preve-cada-um/]. Accessed 21 October 2020.
[3] World Health Organization. "WHO Health Emergency Dashboard". [https://extranet.who.int/publicemergency]. Accessed 21 October 2020.
[4] World Health Organization. "Emergencies preparedness, response: Portugal". [https://www.who.int/csr/don/archive/country/prt/en/]. Accessed 21 October 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

There is public evidence that the government operates an electronic reporting surveillance system at both the national and sub-national level. The National Epidemiological Surveillance System (Sistema Nacional de Vigilância Epidemiológica, or SINAVE) is the country's national public health surveillance system, which operates nationally and at the regional level. [1] It is a real-time electronic web-based reporting tool, which includes laboratory data. [1,2]

[1] Servico Nacional de Saude. "SINAVE". [https://www.dgs.pt/servicos-on-line1/sinave-sistema-nacional-de-vigilancia-epidemiologica.aspx]. Accessed 2 October 2020.
[2] Global Health Security Agenda. 2015. "Global Health Security Pilot Assessment of Portugal: April 12 to 17, 2015".

[https://www.ebola.dgs.pt/documentos-diversos/avaliacoes-externas-documento-ghsa-pdf.aspx]. Accessed 2 October 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

There is public evidence that the government operates an electronic reporting surveillance that collects real-time laboratory data. The National Epidemiological Surveillance System (Sistema Nacional de Vigilância Epidemiológica, or SINAVE) is the country's national public health surveillance system, which operates nationally and at the regional level. [1] It is a real-time electronic web-based reporting tool, which includes laboratory data. [1,2]

[1] Servico Nacional de Saude. "SINAVE". [https://www.dgs.pt/servicos-on-line1/sinave-sistema-nacional-de-vigilancia-epidemiologica.aspx]. Accessed 2 October 2020.
[2] Global Health Security Agenda. 2015. "Global Health Security Pilot Assessment of Portugal: April 12 to 17, 2015". [https://www.ebola.dgs.pt/documentos-diversos/avaliacoes-externas-documento-ghsa-pdf.aspx]. Accessed 2 October 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: 1

There is evidence that electronic health records are in use but they are not currently commonly in use. Portugal has the Electronic Health Registry, which has the objective of collecting essential clinical data of each citizen, in order to create a database that is useful for the public, health professionals, and health care service providers, both public and private. The webportal has four sections: one for private citizens, one for health professionals, one for institutions and one for international entities, such as the EU. [1] However, only the sections for private citizens and for health professionals are currently online and accessible (behind a login page). [2] According to the National Service of Health's (page 72) of the "Portrait of Health 2018" report (which is the latest available as of October 2020), the electronic health records system is available in all primary care facilities and hospitals in the National Service of Health System. [1] In addition, the same report also states that over 1.7m people were registered in the system in 2018, a figure that has been strongly increasing since its implementation in 2010, when there were 146,000 people registered. [1] That said, based on the total population of Portugal, it can be inferred that only 10% of the population use electronic health records.

[1] National Service of Health. "Portrait of Health 2018 (Retrato da Saúde 2018)". [https://www.sns.gov.pt/wp-content/uploads/2018/04/RETRATO-DA-SAUDE_2018_compressed.pdf]. Accessed February 2019.
[2] National Service of Health. "Citizen Area of the SNS Portal (Área do Cidadão do Portal SNS)". [https://servicos.min-saude.pt/utente/]. Accessed 2 October 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: 0

There is insufficient evidence that Portugal's national public health system has access to electronic health records of individuals in the country. Portugal's Electronic Health Registry has plans of creating an institutional section for the Registry's webportal; however, this section is not yet public or completed. The objective of the Registry is to provide data not only to individuals, but also to centralized data for medical professionals and institutions, as well as international institutions such as EU agencies. [1; page 72] The institutional section of the Registry, when completed, will have the objective of addressing issues of public health and epidemiological investigation. [2] The National Service of Health cited here is the competent government health agency and there is no more information on the issue in its website.

[1] National Service of Health. "Portrait of Health 2018 (Retrato da Saúde 2018)". [https://www.sns.gov.pt/wp-content/uploads/2018/04/RETRATO-DA-SAUDE_2018_compressed.pdf]. Accessed February 2019.
[2] National Service of Health. "Citizen Area of the SNS Portal (Área do Cidadão do Portal SNS)". [https://servicos.min-saude.pt/utente/]. Accessed 2 October 2020.

2.4.1c

Are there data standards to ensure data is comparable (e.g., ISO standards)?

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that there are data standards to ensure data is comparable. While the Electronic Health Registry collects individual health data, aggregate data reports or analysis in the system is not yet publicly available; therefore, there is no evidence of any comparability of the data and there are no mentions of ISO data standardization. According to the National Service of Health, there is the intention of building the institutional section of the Registry's webportal; however, there is no evidence that it currently exists. [1] The National Service of Health cited here is the competent government health agency and there is no more information on the issue in its website. The National Institute of Health mentions that it is accredited, including by ISO standards, but they do not mention it to be for its data standards. [2]

[1] National Service of Health. "Citizen Area of the SNS Portal (Área do Cidadão do Portal SNS)". [https://servicos.min-saude.pt/utente/]. Accessed 2 October 2020.
[2] National Institute of Health. "Quality (Qualidade)". [http://www2.insa.pt/sites/INSA/Portugues/QuemSomos/Paginas/PoliticaQualidade.aspx]. Accessed 2 October 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: 0

There is insufficient evidence that Portugal has established mechanisms at the relevant ministries responsible for animal, human and wildlife surveillance to share data. Portugal's National System of Epidemiological Surveillance (SINAVE) is responsible for all kinds of epidemiological surveillance, including diseases that affect humans, animals and wildlife. It is managed by the General Directorate of Health (DGS) and it hosts all collected data on cases of outbreaks of notifiable diseases, which is a list composed by the DGS. [1] Law number 81 of 2009 creates SINAVE and there is no mention of any other public entity outside the Ministry of Health in the document. [2] No further information on the issue was found in the websites for the Ministry of Health, Ministry of Agriculture, Forests and Rural Development, and Ministry of Environment and Energy Transition. [3][4][5] The National Institute of Health does not have any information. [6] The National Institute of Agrarian and Veterinary Research and the National Institute of Health have a One Health project called "COFUND-European Joint Programme (EJP) - Promoting One Health in Europe through joint actions on foodborne zoonoses, antimicrobial resistance and emerging microbiological hazards - One Health EJP"; however, there is no indication of any established mechanisms at the relevant ministries responsible for animal, human and wildlife surveillance to share data. [7]

[1] General Directorate of Health. "Sistema Nacional de Vigilância Epidemiológica (SINAVE): Orientação para Autoridades de Saúde e Unidades de Saúde Pública". [https://www.dgs.pt/ficheiros-de-upload-2013/sinave-orientacao-as-e-usp-pdf.aspx]. Accessed 2 October 2020.
[2] Assembly of the Republic. Law number 81 of 2009. [https://dre.pt/pesquisa/-/search/488301/details/maximized]. Accessed 2 October 2020.
[3] Government of Portugal. "Ministry of Health (Ministério da Saúde)". [https://www.sns.gov.pt/institucional/ministerio-da-saude/]. Accessed 2 October 2020.
[4] Government of Portugal. "Agriculture, Forests and Rural Development (Agricultura, Florestas e Desenvolvimento Rural)". [https://www.portugal.gov.pt/pt/gc21/area-de-governo/agricultura-florestas-e-desenvolvimento-rural]. Accessed 2 October 2020.
[5] Ministry of Environment and Energy Transition. "Documents (Documentos)". [https://www.portugal.gov.pt/pt/gc21/area-de-governo/ambiente#documentos]. Accessed 2 October 2020.
[6] National Institute of Health. "Systemic and zoonotic infections (Infecções sistémicas e zooneses)". [http://www2.insa.pt/sites/INSA/Portugues/AreasCientificas/DoencasInfecciosas/AreasTrabalho/DoencasSist/Paginas/inicial.aspx]. Accessed 2 October 2020.
[7] European Commission. "Promoting One Health in Europe through joint actions on foodborne zoonoses, antimicrobial resistance and emerging microbiological hazards.". [https://cordis.europa.eu/project/id/773830]. Accessed 2 October 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: 0

There is insufficient evidence that Portugal makes de-identified health surveillance data on infectious diseases publicly available via reports on government websites on a regular and frequent basis.

The National Service of Health (SNS) and the General Directorate of Health (DGS) make de-identified health surveillance data on disease outbreaks publicly available via reports on their websites; however, those reports are only developed when there is an outbreak and it is not a regular practice and it is specific to the specific disease it covers. During the COVID-19 pandemic, the General Directorate of Health has published daily reports that include de-identified health surveillance data. As of 21

October 2020, the latest version of the report is of 21 October 2020. The first report is of 3 March 2020. [1]

The DGS publishes those reports every time there are outbreaks of infectious diseases. Prior to the COVID-19 pandemic, the previous disease outbreak that the DGS reported regularly was measles, whose reports ran from 14 March 2018 through 28 May 2018. There was a total of 43 reports during that period, which means there was an average of 1 report every 1.77 days. [2] The SNS publishes the "Retrato da Saúde" ("Health Picture") report, the latest version is of 2018, which provides an overview of the entire health system including data on disease outbreaks. While this report has a wide coverage of diseases, it is done annually; therefore, it is not done frequently enough. [3] The DGS published reports on health statistics, including breakdown of cases across a variety of diseases. [4]

[1] General Directorate of Health. "Situation Report (Relatório de Situação)". [https://covid19.min-saude.pt/relatorio-de-situacao/]. Accessed 21 October 2020.
[2] General Directorate of Health. "Measles: Epidemiological Bulletin (Sarampo: Boletim Epidemiológico)". [https://www.dgs.pt/paginas-de-sistema/saude-de-a-a-z/sarampo1/boletim-epidemiologico.aspx]. Accessed 21 October 2020.
[3] National Service of Health. 2018. "Health Portrait 2018 (Retrato da Saúde 2018)". [https://www.sns.gov.pt/wp-content/uploads/2018/04/RETRATO-DA-SAUDE_2018_compressed.pdf]. Accessed 2 October 2020.
[4] General Directorate of Health. 2016. "Health in numbers (Saúde em números)". [https://www.dgs.pt/documentos-e-publicacoes/portugal-saude-em-numeros-numero-especial-dezembro-20161.aspx]. Accessed 2 October 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

Portugal makes de-identified COVID-19 surveillance data available via daily reports on government websites. The Ministry of Health has created a webportal where it posts daily surveillance data of COVID-19, include confirmed active cases, number of recuperated cases, number of confirmed deaths, total number of confirmed cases, and number of samples it has investigated. [1]

[1] Ministry of Health. "COVID-19". [https://covid19.min-saude.pt/]. Accessed 4 October 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

Portugal has laws (via the EU) that safeguard the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities. Portugal is under the 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 specific and explicit provisions for data obtained for public health studies, which include surveillance activities. [1] Furthermore,

according to the UNCTAD Data Protection Legislation, Portugal has Law 13,709 of 2018 on the protection of personal data, which is aligned with the EU's Regulation 679 of 2016 on General Data Protection Regulation (GDPR) and it restricts the automated processing of personal data concerning the health status of individuals, except when needs to be accessed by public services. [2]

[1] European Parliament. Regulation (EU) 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 2 October 2020.
[2] United Nations Conference on Trade and Development (UNCTAD). "Data Protection and Privacy Legislation Worldwide." [https://unctad.org/page/data-protection-and-privacy-legislation-worldwide] Accessed 2 October 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's General Data Protection Regulation (GDPR) in Portugal, which came into force in May 2018. GDPR 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]

[1] Official Journal of the European Union. 27 April 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 2 October 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, Yes, commitments have been made to share data only for one disease = 1, No = 0

Current Year Score: 2

There is evidence that Portugal has made a commitment to share surveillance data during a public health emergency with other countries in the region and the commitment covers multiple diseases, as there are past examples of multiple diseases being shared.

As a member of the European Union, Portugal 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 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 response…including information related to serious cross-border threats to health and public health measures related to serious cross-border threats to health transmitted through rapid alert and information systems established under other provisions 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 2 October 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_22102013_en.pdf]. Accessed 2 October 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: 0

There is insufficient evidence that Portugal has a national system in place to provide support at the sub-national level to conduct contact tracing in the event of a public health emergency.

The National Plan of Health that is valid until 2020 makes no mention of contact tracing. [1] The new National Plan of Health is currently being developed and there is no estimated date for when it will be released. [2] The National Plan for Preparation and Response to the Disease caused by the New Coronavirus created in 2020 to combat the COVID-19 pandemic does not mention contact tracing. [3] No other evidence was found in the websites of General Directorate of Health, the National Service of Health, the National Insitute of Health, or the General Directorate of Food and Veterinary. [4,5,6,7] There are reports from April 2020 that Portugal has approved the use of mobile apps for users to trace contact with those infected by COVID-19; however, the use of the app is voluntary and it is not mentioned in any plan to be dispersed across the country. [8,9,10,11]

[1] General Directorate of Health. May 2015. "National Plan of Health: Revision and Extension to 2020 (Plano Nacional de Saúde: Revisão e extensão a 2020)". [http://pns.dgs.pt/files/2015/06/Plano-Nacional-de-Saude-Revisao-e-Extensao-a-2020.pdf.pdf]. Accessed 4 October 2020.
[2] General Directorate of Health. "National Health Plan (Plano Nacional de Saúde)". [https://pns.dgs.pt/]. Accessed 4 October 2020.
[3] General Directorate of Health. March 2020. "National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19) (Plano Nacional de Preparação e Resposta à Doença por novo coronavírus (COVID-19))". [https://covid19.min-saude.pt/wp-content/uploads/2020/03/Plano-de-Conting%C3%AAncia-Novo-Coronavirus_Covid-19.pdf]. Accessed 4 October 2020.
[4] General Directorate of Health website. [https://www.dgs.pt/]. Accessed 4 October 2020.
[5] National Service of Health website. [https://www.sns.gov.pt/]. Accessed 4 October 2020.
[6] National Insitute of Health. "Investigation and Development (Investigação e Desenvolvimento)". [http://www2.insa.pt/sites/INSA/Portugues/AreasCientificas/Epidemiologia/Paginas/InvestigacaoDesenvolvimento.aspx]. Accessed 4 October 2020.
[7] General Directorate of Food and Veterinary website. [http://www.dgv.min-agricultura.pt/portal/page/portal/DGV]. Accessed 4 October 2020.
[8] Pequenino, K. Publico. 27 April 2020. "Of voluntary use, with beeps, by bluetooth: how will be the app to track contagions of covid-19 in Portugal (De uso voluntário, com beeps, por bluetooth: como será a app para rastrear contágios de covid-19 em Portugal)". [https://www.publico.pt/2020/04/27/ciencia/noticia/apresentada-hoje-aplicacao-telemovel-rastreio-contagio-covid19-1914036]. Accessed 4 October 2020.
[9] Martinho, M. Observador. 28 April 2020. "There is yet another Portuguese application to track Covid-19 cases anonymously (Há mais uma aplicação portuguesa para rastrear casos de Covid-19 de forma anónima)". [https://observador.pt/2020/04/28/como-sera-a-app-que-o-governo-quer-usar-para-rastrear-casos-de-covid-19-em-portugal/]. Accessed 4 October 2020.
[10] Expresso. 27 April 2020. "Portugal will have an app to track covid-19 cases. And how is it done out there? (Portugal vai ter app para rastrear casos de covid-19. E como se faz lá fora?)". [https://expresso.pt/coronavirus/2020-04-27-Portugal-vai-ter-app-para-rastrear-casos-de-covid-19.-E-como-se-faz-la-fora-]. Accessed 4 October 2020.
[11] Jornal Médico. 8 April 2020. "Covid-19: Platform launched that allows anonymous tracking of contagion networks in Portugal (Covid-19: Lançada plataforma que permite o rastreamento anónimo das redes de contágio em Portugal)". [https://jornalmedico.pt/atualidade/38701-covid-19-lancada-plataforma-que-permite-o-rastreamento-anonimo-das-redes-de-contagio-em-portugal.html]. Accessed 4 October 2020.

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

There is insufficient evidence that Portugal provides 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.

The National Plan of Health that is valid until 2020 makes no mention of wraparound services for confirmed or suspected cases of a disease to self-isolate. [1] The new National Plan of Health is currently being developed and there is no estimated date for when it will be released. [2] The National Plan for Preparation and Response to the Disease caused by the New Coronavirus created in 2020 to combat the COVID-19 pandemic does not mention wraparound services, although it mentions

social distancing, isolation of patients, and quarantine. Those isolation measures do not include wraparound services. [3]

No other evidence was found in the websites of General Directorate of Health, the National Service of Health, the National Insitute of Health, or the General Directorate of Food and Veterinary. [4,5,6,7] However, there is evidence that Portugal during the COVID-19 pandemic has provided wraparound services to the general population, regardless if they were infected or not. For formal workers, the Portuguese government guaranteed 100% of the workers' salary during the isolation period, regardless of their health status or sector in which they worked. It covered both public and private sector workers. [8] In addition, the Portuguese government also expanded their social programs to informal workers, people at risk of entering extreme poverty, and small business owners. The expansion of those social programs were not contingent on the person being infected or not by COVID-19. [9]

[1] General Directorate of Health. May 2015. "National Plan of Health: Revision and Extension to 2020 (Plano Nacional de Saúde: Revisão e extensão a 2020)". [http://pns.dgs.pt/files/2015/06/Plano-Nacional-de-Saude-Revisao-e-Extensao-a-2020.pdf.pdf]. Accessed 4 October 2020.
[2] General Directorate of Health. "National Health Plan (Plano Nacional de Saúde)". [https://pns.dgs.pt/]. Accessed 4 October 2020.
[3] General Directorate of Health. March 2020. "National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19) (Plano Nacional de Preparação e Resposta à Doença por novo coronavírus (COVID-19))". [https://covid19.min-saude.pt/wp-content/uploads/2020/03/Plano-de-Conting%C3%AAncia-Novo-Coronavirus_Covid-19.pdf]. Accessed 4 October 2020.
[4] General Directorate of Health website. [https://www.dgs.pt/]. Accessed 4 October 2020.
[5] National Service of Health website. [https://www.sns.gov.pt/]. Accessed 4 October 2020.
[6] National Insitute of Health. "Investigation and Development (Investigação e Desenvolvimento)". [http://www2.insa.pt/sites/INSA/Portugues/AreasCientificas/Epidemiologia/Paginas/InvestigacaoDesenvolvimento.aspx]. Accessed 4 October 2020.
[7] General Directorate of Food and Veterinary website. [http://www.dgv.min-agricultura.pt/portal/page/portal/DGV]. Accessed 4 October 2020.
[8] Diário de Notícias. 2 March 2020. "Covid-19. Quarantine pays 100% for Social Security to all workers (Covid-19. Quarentena paga a 100% pela Segurança Social a todos os trabalhadores)". [https://www.dn.pt/poder/covid-19-quarentena-paga-a-100-pela-seguranca-social-11880649.html]. Accessed 4 October 2020.
[9] Agência Brasil. 8 May 2020. "Portugal expands social protection amid pandemic (Portugal amplia amparo social em meio à pandemia)". [https://agenciabrasil.ebc.com.br/internacional/noticia/2020-05/portugal-amplia-amparo-social-em-meio-pandemia]. Accessed 4 October 2020.

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

There is insufficient evidence that Portugal makes de-identified data on contact tracing efforts for COVID-19 available via daily reports on government websites. The Ministry of Health created a webportal where it divulges all surveillance data on COVID-19 in the country. There is no data on contract tracing efforts. [1] The National Plan for Preparation and Response to the Disease caused by the New Coronavirus created in 2020 to combat the COVID-19 pandemic does not mention contact tracing. [2] No other evidence was found in the websites of General Directorate of Health, the National Service of Health, or

the National Insitute of Health. [3,4,5] There are reports from April 2020 that Portugal has approved the use of mobile apps for users to trace contact with those infected by COVID-19; however, the use of the app is voluntary and it is not mentioned in any plan to be dispersed across the country. [6,7,8,9]

[1] Ministry of Health. "COVID-19". [https://covid19.min-saude.pt/]. Accessed 4 October 2020.
[2] General Directorate of Health. March 2020. "National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19) (Plano Nacional de Preparação e Resposta à Doença por novo coronavírus (COVID-19))". [https://covid19.min-saude.pt/wp-content/uploads/2020/03/Plano-de-Conting%C3%AAncia-Novo-Coronavirus_Covid-19.pdf]. Accessed 4 October 2020.
[3] General Directorate of Health website. [https://www.dgs.pt/]. Accessed 4 October 2020.
[4] National Service of Health website. [https://www.sns.gov.pt/]. Accessed 4 October 2020.
[5] National Insitute of Health. "Investigation and Development (Investigação e Desenvolvimento)". [http://www2.insa.pt/sites/INSA/Portugues/AreasCientificas/Epidemiologia/Paginas/InvestigacaoDesenvolvimento.aspx]. Accessed 4 October 2020.
[6] Pequenino, K. Publico. 27 April 2020. "Of voluntary use, with beeps, by bluetooth: how will be the app to track contagions of covid-19 in Portugal (De uso voluntário, com beeps, por bluetooth: como será a app para rastrear contágios de covid-19 em Portugal)". [https://www.publico.pt/2020/04/27/ciencia/noticia/apresentada-hoje-aplicacao-telemovel-rastreio-contagio-covid19-1914036]. Accessed 4 October 2020.
[7] Martinho, M. Observador. 28 April 2020. "There is yet another Portuguese application to track Covid-19 cases anonymously (Há mais uma aplicação portuguesa para rastrear casos de Covid-19 de forma anónima)". [https://observador.pt/2020/04/28/como-sera-a-app-que-o-governo-quer-usar-para-rastrear-casos-de-covid-19-em-portugal/]. Accessed 4 October 2020.
[8] Expresso. 27 April 2020. "Portugal will have an app to track covid-19 cases. And how is it done out there? (Portugal vai ter app para rastrear casos de covid-19. E como se faz lá fora?)". [https://expresso.pt/coronavirus/2020-04-27-Portugal-vai-ter-app-para-rastrear-casos-de-covid-19.-E-como-se-faz-la-fora-]. Accessed 4 October 2020.
[9] Jornal Médico. 8 April 2020. "Covid-19: Platform launched that allows anonymous tracking of contagion networks in Portugal (Covid-19: Lançada plataforma que permite o rastreamento anónimo das redes de contágio em Portugal)". [https://jornalmedico.pt/atualidade/38701-covid-19-lancada-plataforma-que-permite-o-rastreamento-anonimo-das-redes-de-contagio-em-portugal.html]. Accessed 4 October 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: 0

There is insufficient evidence that there is in Portugal 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 or future public health emergency.

Portugal has the National Integrated Border Management Strategy, which was created by Council of Ministers Resolution 104 of 2017. The Strategy creates a board of authorities, which may include representatives from the National Health Authority

— they are not core participants of the meetings, but they may attend if they want. The Strategy also creates a Work Group that includes the General Directorate of Health. The Work Group meets every month to discuss issues related to border control, such as the entrance of refugees. The issue of identifying suspected and potential cases in international travelers and trace and quarantine their contacts in the event of a public health emergency is not mentioned in the document. [1]

No other evidence was found in the websites of General Directorate of Health, the National Service of Health, or the National Insitute of Health. [2,3,4] No relevant evidence was found in the website of the Immigration and Borders Service, which is responsible for border control in Portugal. [5] The National Plan for Preparation and Response to the Disease caused by the New Coronavirus of 2020 does not mention any agreement or specific measures for border control authorities. [6]

[1] Council of Ministers. Resolution 104 of 2017 on the National Integrated Border Management Strategy. [https://dre.pt/application/conteudo/107693728]. Accessed 4 October 2020.
[2] General Directorate of Health website. [https://www.dgs.pt/]. Accessed 4 October 2020.
[3] National Service of Health website. [https://www.sns.gov.pt/]. Accessed 4 October 2020.
[4] National Insitute of Health. "Investigation and Development (Investigação e Desenvolvimento)". [http://www2.insa.pt/sites/INSA/Portugues/AreasCientificas/Epidemiologia/Paginas/InvestigacaoDesenvolvimento.aspx]. Accessed 4 October 2020.
[5] Immigration and Borders Service website. [https://www.sef.pt/en/Pages/homepage.aspx]. Accessed 4 October 2020.
[6] General Directorate of Health. March 2020. "National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19) (Plano Nacional de Preparação e Resposta à Doença por novo coronavírus (COVID-19))". [https://covid19.min-saude.pt/wp-content/uploads/2020/03/Plano-de-Conting%C3%AAncia-Novo-Coronavirus_Covid-19.pdf]. Accessed 7 April 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 = 0

Current Year Score: 1

There are applied epidemiology training programmes available in Portugal, and there is evidence that resources are provided by the government to send citizens to another country to participate in applied epidemiology training programmes. As a member of the EU, Portugal is one of the member state hosts of the European Programme for Intervention Epidemiology Training (EPIET). [1] The programme is organised by the European Centre for Disease Prevention and Control (ECDC) and in Portugal it is operated and managed by the General Directorate of Health (DGS). EPIET is a field epidemiology programme that puts its fellows to support surveillance activities, investigations and research. EPIET provides funding to send citizens to another country to participate in applied epidemiology training programs. [2]

[1] 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-the-european]. Accessed 2 October 2020.
[2] European Centre for Disease Prevention and Control. "General Directorate of Health - EPIET (Direção-Geral da Saúde - EPIET)". [https://ecdc.europa.eu/en/direcao-geral-da-saude-epiet]. Accessed 2 October 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

As a member of the EU, Portugal is one of the member state hosts of the European Programme for Intervention Epidemiology Training (EPIET), which includes animal health professionals in the training of field epidemiology. [1] The programme is organised by the European Centre for Disease Prevention and Control (ECDC) and in Portugal it is operated and managed by the General Directorate of Health (DGS). EPIET is a field epidemiology programme that puts its fellows to support surveillance activities, investigations and research. [2]

[1] 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-the-european]. Accessed 2 October 2020.
[2] European Centre for Disease Prevention and Control. "General Directorate of Health - EPIET (Direção-Geral da Saúde - EPIET)". [https://ecdc.europa.eu/en/direcao-geral-da-saude-epiet]. Accessed 2 October 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: 2

Portugal has a national public emergency response plan in place, it includes a section for public health emergencies, and it is publicly available. The National Plan for Emergencies of Civil Protection (which is a direct translation) of 2013 is a comprehensive plan that engages all government entities and the private sector to address overall emergency preparedness. In page 11, the Plan notes that it considers chemical, biological, radiological and nuclear threats, not only earthquakes, floods, etc. There is a section in pages 75-78 dedicated to public health entities, which lists out the objectives and responsibilities to several entities, including the General Directorate of Health (DGS), Hospitals and other health care service providers, the National Authority on Drugs and Health Products (INFARMED), the National Institute of Health (INSA), the Portuguese Institute of Blood and Transplants (IPST) and the National Institute for Agricultural and Veterinary Research (INIAV). [1]. Furthermore, Portugal has the Centre for Public Health Emergencies (CESP), which operates under the General Directorate of Health (DGS), and is responsible for developing a multi-sector plan to address potential risk events involving communicable diseases and pandemics. [2] There is no evidence that a plan specific for general public health emergencies has been created yet as per the DGS, which is the only relevant agency for this specific issue and it is part of the Ministry of Health. [2] While there is no overall public health emergency plan, the DGS has published a contingency plan specific for the flu in 2007. The plan provides a comprehensive view of the risks and challenges for Portugal in addressing such event, as well as a full solution and plan, so that there is coordination across multiple agencies in the government. [3] The DGS has also prepared a contingency plan for the ebola virus in 2015. Like the flu plan of 2007, the ebola plan of 2015 provides a comprehensive evaluation of risks and provides detailed guidelines for all different sectors of the public and private sectors. [4] The IPST has created its own national emergency plan for events and responses that have most impact on their line of work (blood and transplants). As such, it has created a section dedicated to pandemics and how it should respond in such events, including interactions and with other agencies and the private sectors. [5] In March 2020, the DGS publishes its National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19). It is a comprehensive plan that includes measures for several facets of the public health emergency, including epidemiological surveillance, laboratorial capacity, public health measures, management of cases, prevention and control of infections, international health, communication and social mobilization, and knowledge and research. [6]

[1] National Civil Protection Authority. 2013. "National Plan for Emergencies of Civil Protection (Plano Nacional de Emergência de Proteção Civil)". [http://www.prociv.pt/bk/RISCOSPREV/Documents/Componentes_p%C3%BAblicas.pdf]. Accessed 2 October 2020.
[2] General Directorate of Health. "Centre for Public Health Emergencies (Centro de Emergências em Saúde Pública)". [https://www.dgs.pt/a-dgs/direcao-e-organica/unidade-de-apoio-a-autoridade-de-saude-nacional-e-a-gestao-de-emergencias-em-saude-publica/centro-de-emergencias-em-saude-publica.aspx]. Accessed 2 October 2020.

[3] General Directorate of Health. 2007. "Plano de Contingência Nacional do Sector da Saúde para a Pandemia de Gripe". [https://www.dgs.pt/documentos-e-publicacoes/plano-de-contingencia-nacional-do-sector-da-saude-para-a-pandemia-de-gripe-pdf.aspx]. Accessed 2 October 2020.
[4] General Directorate of Health. 2015. "Plano de Contingência Nacional do Setor da Saúde para a Doença por Vírus Ébola". [http://www.ebola.dgs.pt/materiais1/ficheiros/plano-de-contingencia-pdf.aspx]. Accessed 2 October 2020.
[5] Portuguese Institute of Blood and Transplants. 2014. "Plano Nacional de Emergência para Eventos com Potencial Impacto na Missão do IPST". [http://www.ipst.pt/files/IPST/INTRUMENTOS_GESTAO/PO.51.1.1_Plano_de_Emergencia.pdf]. Accessed 2 October 2020.
[6] General Directorate of Health. March 2020. "National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19) (Plano Nacional de Preparação e Resposta à Doença por novo coronavírus (COVID-19))". [https://covid19.min-saude.pt/wp-content/uploads/2020/03/Plano-de-Conting%C3%AAncia-Novo-Coronavirus_Covid-19.pdf]. Accessed 2 October 2020.

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

The overall emergency preparedness plan in Portugal, the National Plan for Emergencies of Civil Protection, was created in 2013 and has not been updated since. [1] The National Plan for Emergencies of Civil Protection (which is a direct translation) is a comprehensive plan that engages all government entities and the private sector to address overall emergency preparedness. In page 11, the Plan notes that it considers chemical, biological, radiological and nuclear threats, not only earthquakes, floods, etc. There is a section in pages 75-78 dedicated to public health entities, which lists out the objectives and responsibilities to several entities, including the General Directorate of Health (DGS), Hospitals and other health care service providers, the National Authority on Drugs and Health Products (INFARMED), the National Institute of Health (INSA), the Portuguese Institute of Blood and Transplants (IPST) and the National Institute for Agricultural and Veterinary Research (INIAV). [1]. The latest plan in place is the contingency plan against COVID-19, and it was published in March 2020. [2]

[1] National Civil Protection Authority. 2013. "National Plan for Emergencies of Civil Protection (Plano Nacional de Emergência de Proteção Civil)". [http://www.prociv.pt/bk/RISCOSPREV/Documents/Componentes_p%C3%BAblicas.pdf]. Accessed 2 October 2020.
[2] General Directorate of Health. March 2020. "National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19) (Plano Nacional de Preparação e Resposta à Doença por novo coronavírus (COVID-19))". [https://covid19.min-saude.pt/wp-content/uploads/2020/03/Plano-de-Conting%C3%AAncia-Novo-Coronavirus_Covid-19.pdf]. Accessed 2 October 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: 1

The overall emergency preparedness plan in Portugal, the National Plan for Emergencies of Civil Protection, includes considerations for paediatric and other vulnerable populations, such as the elderly, the homeless, and hospitalized people. On page 81, takes into account the work of NGOs that provide services to vulnerable populations into the Plan. [1] The National Plan for Emergencies of Civil Protection (which is a direct translation) is a comprehensive plan that engages all

government entities and the private sector to address overall emergency preparedness. In page 11, the Plan notes that it considers chemical, biological, radiological and nuclear threats, not only earthquakes, floods, etc. There is a section in pages 75-78 dedicated to public health entities, which lists out the objectives and responsibilities to several entities, including the General Directorate of Health (DGS), Hospitals and other health care service providers, the National Authority on Drugs and Health Products (INFARMED), the National Institute of Health (INSA), the Portuguese Institute of Blood and Transplants (IPST) and the National Institute for Agricultural and Veterinary Research (INIAV). [1].

[1] National Civil Protection Authority. 2013. "National Plan for Emergencies of Civil Protection (Plano Nacional de Emergência de Proteção Civil)". [http://www.prociv.pt/bk/RISCOSPREV/Documents/Componentes_p%C3%BAblicas.pdf]. Accessed 2 October 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

There is no evidence that Portugal has a specific mechanism for engaging with the private sector to assist with outbreak emergency preparedness and response. While Portugal has the Centre for Public Health Emergencies (CESP), no plan on dealing with such emergencies has been created by CESP. There is no evidence in the website of the CESP of any MOU, established agreement or strategy document. [1] In the contingency plans for civil protection, for flu and for ebola virus disease, there are several mentions, incorporating the private sector into the plan. However, there are no specific mechanisms to provide more concrete support from the private sector in the websites for the National Civil Protection Authority and General Directorate of Health. [2][3][4] National Plan for Emergencies of Civil Protection includes the private sector in the plans, as it mentions it several parts of the document; however, there are no specific measures dedicated to engage with the private sector. The mentions include the private the sector into the plan, without assigning it specific roles or engagement actions during an outbreak of a public health emergency. [2] The National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19) of March 2020 mentions the private sector and its importance to engage to combat the disease, but there are no specific mechanisms. [5]

[1] General Directorate of Health. "Centre for Public Health Emergencies (Centro de Emergências em Saúde Pública)". [https://www.dgs.pt/a-dgs/direcao-e-organica/unidade-de-apoio-a-autoridade-de-saude-nacional-e-a-gestao-de-emergencias-em-saude-publica/centro-de-emergencias-em-saude-publica.aspx]. Accessed 2 October 2020.

[2] National Civil Protection Authority. 2013. "National Plan for Emergencies of Civil Protection (Plano Nacional de Emergência de Proteção Civil)". [http://www.prociv.pt/bk/RISCOSPREV/Documents/Componentes_p%C3%BAblicas.pdf]. Accessed 2 October 2020.
[3] General Directorate of Health. 2007. "National Contingency Plan of the Health Sector for the Flu Pandemic (Plano de Contingência Nacional do Sector da Saúde para a Pandemia de Gripe)". [https://www.dgs.pt/documentos-e-publicacoes/plano-de-contingencia-nacional-do-sector-da-saude-para-a-pandemia-de-gripe-pdf.aspx]. Accessed 2 October 2020.
[4] General Directorate of Health. 2015. "National Contingency Plan of the Health Sector for Ebola Virus Disease (Plano de Contingência Nacional do Setor da Saúde para a Doença por Vírus Ébola)". [http://www.ebola.dgs.pt/materiais1/ficheiros/plano-de-contingencia-pdf.aspx]. Accessed 2 October 2020.
[5] General Directorate of Health. March 2020. "National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19) (Plano Nacional de Preparação e Resposta à Doença por novo coronavírus (COVID-19))". [https://covid19.min-saude.pt/wp-content/uploads/2020/03/Plano-de-Conting%C3%AAncia-Novo-Coronavirus_Covid-19.pdf]. Accessed 2 October 2020.

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: 1

There is sufficient evidence that Portugal has a disease-specific plan in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic. The National Plan for Preparation and Response to the Disease caused by the New Coronavirus of March 2020 has a detailed section on NPIs, particularly social distancing and enhanced personal hygiene. The Plan outlines specific criteria for social distancing and enhanced personal hygiene; however there is no indication that these guidelines will be applied to other public health emergencies. [1] The National Plan of Health is valid until 2020 and makes no mentions of NPIs. [2] The National Plan for Emergencies of Civil Protection of 2013 makes no mentions of NPIs. [3]

[1] General Directorate of Health. March 2020. "National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19) (Plano Nacional de Preparação e Resposta à Doença por novo coronavírus (COVID-19))". [https://covid19.min-saude.pt/wp-content/uploads/2020/03/Plano-de-Conting%C3%AAncia-Novo-Coronavirus_Covid-19.pdf]. Accessed 4 October 2020.
[2] General Directorate of Health. May 2015. "National Plan of Health: Revision and Extension to 2020 (Plano Nacional de Saúde: Revisão e extensão a 2020)". [http://pns.dgs.pt/files/2015/06/Plano-Nacional-de-Saude-Revisao-e-Extensao-a-2020.pdf.pdf]. Accessed 4 October 2020.
[3] National Civil Protection Authority. 2013. "National Plan for Emergencies of Civil Protection (Plano Nacional de Emergência de Proteção Civil)". [http://www.prociv.pt/bk/RISCOSPREV/Documents/Componentes_p%C3%BAblicas.pdf]. Accessed 4 October 2020.

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

There is evidence that Portugal has activated its national emergency response plan for an infectious disease outbreak in the past year; however, there is insufficient evidence that Portugal has completed a national-level biological threat-focused exercise (either with WHO or separately) in the past year.

During the COVID-19 pandemic, Portugal activated its National Plan for Preparation and Response to the Disease caused by the New Coronavirus, which was developed in March 2020. [1] In regards to a national-level biological threat-focused exercise, the last exercise occurred in November 2018, which is over one year ago. On 13 November 2018, Portugal has conducted a Table Top Exercise (TTX) simulation that involved the public health sector and the military sector, in order to identify gaps and best practices in responding to public health emergencies. [2] In addition, the National Plan for Emergencies of Civil Protection of 2013 was activated on 24 March 2020, also to address the COVID-19 pandemic. The announcement of the activation was made by the Internal Administration State Secretary to the press. [3,4]

[1] General Directorate of Health. March 2020. "National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19) (Plano Nacional de Preparação e Resposta à Doença por novo coronavírus (COVID-19))". [https://covid19.min-saude.pt/wp-content/uploads/2020/03/Plano-de-Conting%C3%AAncia-Novo-Coronavirus_Covid-19.pdf]. Accessed 4 October 2020.
[2] World Health Organization. "Portugal TTX Nov.2018". [https://extranet.who.int/sph/portugal-ttx-nov2018]. Accessed 4 October 2020.
[3] National Civil Protection Authority. 2013. "National Plan for Emergencies of Civil Protection (Plano Nacional de Emergência de Proteção Civil)". [http://www.prociv.pt/bk/RISCOSPREV/Documents/Componentes_p%C3%BAblicas.pdf]. Accessed 21 October 2020.
[4] Expresso. 25 March 2020. "Covid-19. The national civil protection emergency plan has been activated: what does this mean in practice? (Covid-19. Foi ativado o plano nacional de emergência de proteção civil: o que é que isso significa na prática?)". [https://expresso.pt/coronavirus/2020-03-25-Covid-19.-Foi-ativado-o-plano-nacional-de-emergencia-de-protecao-civil-o-que-e-que-isso-significa-na-pratica-]. Accessed 21 October 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 in the past year, Portugal has undergone an exercise to identify a list of gaps and best practices through either an after action review (post emergency response) or a biological threat-focused IHR exercise with the WHO. On 13 November 2018, Portugal has conducted a TTX simulation exercise that involved the public health sector and the military sector, in order to identify gaps and best practices in responding to public health emergencies. In addition, the exercise also had the objectives of: "identify a shared vision for global health security according to a multisectoral perspective; contribute to and support Portuguese speaking countries in the development of action plans for global health security; discuss guiding principles for collaboration between military health services and the public health sector, as well as with other relevant sectors." [1] The exercise involved not only Portugal but officials from other Portuguese-speaking countries. [1] However, no evidence of an after action review in response to the exercise could be located. [2]

[1] World Health Organization. "Portugal TTX Nov.2018". [https://extranet.who.int/sph/portugal-ttx-nov2018]. Accessed 2 October 2020.
[2] World Health Organization. "After action review". [https://extranet.who.int/sph/after-action-review]. Accessed 2 October 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 insufficient evidence that Portugal has in the past year has undergone a national-level biological threat-focused exercise that has included private sector representatives. The last exercise occurred in November 2018, which is over one year ago. On 13 November 2018, Portugal has conducted a TTX simulation exercise that involved the public health sector and the military sector, in order to identify gaps and best practices in responding to public health emergencies. There are no mentions of the private sector in the report. [1]There is no further evidence on the WHO Simulation Exercise page. [2]

[1] World Health Organization. "Portugal TTX Nov.2018". [https://extranet.who.int/sph/portugal-ttx-nov2018]. Accessed 2 October 2020.
[2] World Health Organization (WHO). Simulation Exercise. [https://extranet.who.int/sph/simulation-exercise]. Accessed 2 October 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

Portugal has in place an emergency operations centre for general emergencies as well as an emergency operations centre for health-related emergencies, including pandemics. The National Civil Protection Authority (ANPC) is the national authority in times of emergencies and crisis, providing a central service for all emergency operations in the country. [1] Portugal also has the Centre for Public Health Emergencies (CESP), which operates under the General Directorate of Health (DGS), and is responsible for developing a multi-sector plan to address potential risk events involving communicable diseases and pandemics, anticipating and identifying potential public health threats, emitting alerts in cases of public health threats, among other public health emergency management tasks. [2] There is no evidence that such plan has been created yet.

[1] National Civil Protection Authority. "Who are we (Quem somos)". [http://www.prociv.pt/pt-pt/PROTECAOCIVIL/ANPC/QUEMSOMOS/Paginas/default.aspx]. Accessed 2 October 2020.
[2] General Directorate of Health. "Centre for Public Health Emergencies (Centro de Emergências em Saúde Pública)". [https://www.dgs.pt/a-dgs/direcao-e-organica/unidade-de-apoio-a-autoridade-de-saude-nacional-e-a-gestao-de-emergencias-em-saude-publica/centro-de-emergencias-em-saude-publica.aspx]. Accessed 2 October 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

There is no evidence that either the National Civil Protection Authority (ANPC) or the Centre for Public Health Emergencies (CESP) are required to conduct a drill at least once per year.

Decree-Law number 45 of 2019 is the organic law for the ANPC. There are no mentions in the entire document of any requirement for a drill at least once year. [1] The Centre for Public Health Emergencies (CESP) of Portugal is responsible for conducting drill exercises for public health emergencies involving relevant actors, according to Article 3f of its official creating document, Dispatch 11035-A of 2016 of the Ministry of Health. [2] However, the document does not mention how regular or what frequency at which drills must be conducted. According to the Global Health Security Agenda Pilot Assessment of Portugal, there have been four simulations for ebola virus disease as of 2015 to test plans and procedure. [3] No further documentation on those exercises have been found nor is there any confirmation that the exercise is conducted annual or any requirement for it conducted.

[1] Government of Portugal. Decree-law number 45 of 2019. [https://dre.pt/web/guest/home/-/dre/121748967/details/maximized]. Accessed 2 October 2020.
[2] Ministry of Health. Dispatch number 11035-A of 2016. [https://dre.pt/application/file/75324177]. Accessed 2 October 2020.
[3] Global Health Security Agenda. 2015. "Global Health Security Pilot Assessment of Portugal: April 12 to 17, 2015". [https://www.ebola.dgs.pt/documentos-diversos/avaliacoes-externas-documento-ghsa-pdf.aspx]. Accessed 2 October 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 that shows that neither the National Civil Protection Authority (ANPC) nor the Centre for Public Health Emergencies (CESP) of Portugal can conduct or has conducted a coordinated emergency response or emergency response exercise that activated within 120 minutes of the identification of the public health emergency or scenario. According to the Global Health Security Agenda Pilot Assessment of Portugal, there have been four simulations for ebola virus disease as of 2015 to test plans and procedure. [1] No further documentation on those exercises have been found nor is there any confirmation that the exercise activated within 120 minutes of the identification of the public health scenario. No further evidence was found in WHO reports on exercises or assessments [2] or in the Sendai Framework document for Europe [3]. No further evidence was found in the Ministry of Health. [4]

[1] Global Health Security Agenda. 2015. "Global Health Security Pilot Assessment of Portugal: April 12 to 17, 2015". [https://www.ebola.dgs.pt/documentos-diversos/avaliacoes-externas-documento-ghsa-pdf.aspx]. Accessed 2 October 2020.
[2] World Health Organization. "Portugal TTX Nov.2018". [https://extranet.who.int/sph/portugal-ttx-nov2018]. Accessed 2 October 2020.
[3] European Forum for Disaster Risks Reduction. "European Forum for Disaster Risk Reduction 2015-2020 Roadmap for the Implementation of the Sendai Framework". [https://www.unisdr.org/files/55096_55096efdrrroadmap20152020anditsacti.pdf]. Accessed 2 October 2020.
[4] Government of Portugal. "Ministry of Health (Ministério da Saúde)". [https://www.sns.gov.pt/institucional/ministerio-da-saude/]. Accessed 2 October 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: 0

There is insufficient evidence that Portugal has carried out exercises to respond to a potential deliberate biological event and it has publicly-available standard operating procedures between public health and security authorities to respond to a potential deliberate biological event. According to the Global Health Security Agenda Pilot Assessment of Portugal in page 37, the Centre for Public Health Emergencies (CESP) conducted a LIVEX exercise on bioterrorism in 2014 involving the "National Civil Protection Authority (CNOS and CDOS Lisbon); National Guard; National Institute of Medical Emergency; Health General Directorate; PJ; National Institute of Health Dr. Ricardo Jorge, IP (INSA, IP); Loures Fire Department". [1] Furthermore, on 13 November 2018, Portugal has conducted a TTX simulation exercise that involved the public health sector and the military sector, in order to identify gaps and best practices in responding to public health emergencies. In addition, the exercise also had the objectives of: "identify a shared vision for global health security according to a multisectoral perspective; contribute

to and support Portuguese speaking countries in the development of action plans for global health security; discuss guiding principles for collaboration between military health services and the public health sector, as well as with other relevant sectors." [2] The exercise involved not only Portugal but officials from other Portuguese-speaking countries. [2] Furthermore, the National Operation Guidelines of October 2010 deals with chemical, biological, radiological and nuclear threats and it has specific measures to deal with biological threats, including the procedures for public health and security authorities. [3]

[1] Global Health Security Agenda. 2015. "Global Health Security Pilot Assessment of Portugal: April 12 to 17, 2015". [https://www.ebola.dgs.pt/documentos-diversos/avaliacoes-externas-documento-ghsa-pdf.aspx]. Accessed 2 October 2020.
[2] World Health Organization. "Portugal TTX Nov.2018". [https://extranet.who.int/sph/portugal-ttx-nov2018]. Accessed 2 October 2020.
[3] National Authority of Civil Protection. October 2010. "National Operational Guidelines no. 3 - CBRN (Directiva Operacional Nacional no. 3 - NRBQ)". [http://www.prociv.pt/bk/PROTECAOCIVIL/LEGISLACAONORMATIVOS/Directivas/ANPC_DON-3_NRBQ.pdf]. Accessed 2 October 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

Portugal has a strategy in place to guide how messages will reach populations and sectors with different communications needs. According to the 'Global Health Security Agenda Pilot Assessment of Portugal' of 2015 in page 44, the communication risk plan uses media products including "a specific website; fliers and posters; and television and radio spots. Online information management includes website, social networks and ePORTUGUÊSE; banner on other agencies' websites; and usage of the PDS - Health Data Platform." [1] In the same document (page 45), it further states: "Health professionals liaison with the national task force to receive the latest information in articulation with the training programme. A centralized network of communicators is used to assure effective and coordinated messages to the public. Media management includes a network of experts to elaborate answers to media questions by subject (e.g., drugs; patient transportation; epidemiology); press conferences; informational workshops; for press release templates to use for the first confirmed case and for subsequent confirmed cases; and for workflow of information for media offices in main health services." [1] Furthermore, the National Plan for Emergencies of Civil Protection has a section on communication that includes strategies to reach populations and sectors with different communications needs during emergencies. For example, any special needs must be registered with the ZCAP (the institution responsible for coordinating supplies during rescue operations). [2]

[1] Global Health Security Agenda. 2015. "Global Health Security Pilot Assessment of Portugal: April 12 to 17, 2015". [https://www.ebola.dgs.pt/documentos-diversos/avaliacoes-externas-documento-ghsa-pdf.aspx]. Accessed 4 October 2020.
[2] National Civil Protection Authority. 2013. "National Plan for Emergencies of Civil Protection (Plano Nacional de Emergência de Proteção Civil)". [http://www.prociv.pt/bk/RISCOSPREV/Documents/Componentes_p%C3%BAblicas.pdf]. Accessed 4 October 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

Portugal has in place the National Plan for Emergencies of Civil Protection, which includes risk communication strategy. The document in page 50 takes into account every government agency and places specific responsibilities upon them, including risk communication, which was given to the National Civil Protection Authority (ANPC). [1] For health-related plans, the risk communication strategy is also clearly noted and detailed. The DGS has published a contingency plan specific for the flu in 2007. The plan provides in page 255 a comprehensive view of the risks and challenges for Portugal in addressing such event, as well as a full solution and plan, and a thorough risk communication strategy. [2] The DGS has also prepared a contingency plan for the ebola virus in 2015. Like the flu plan of 2007, the ebola plan of 2015 in page 28 provides a comprehensive risk communication strategy. [3] The IPST has created its own national emergency plan for events and responses that have most impact on their line of work (blood and transplants). As such, it has created a section dedicated to pandemics and how it should respond in such events, including a detailed risk communication strategy. [4] More recently, the National Plan for Preparation and Response to the Disease caused by the New Coronavirus of March 2020 has an entire section (VII) devoted to communication plan to deal with the public health emergency. [5] Further evidence that Portugal engages with risk communication is the Centre for Public Health Emergencies (CESP), whose is responsible to rapidly communicate public health concerns. [6] According to the Global Health Security Agenda Pilot Assessment of Portugal in page 37, CESP conducted training on "Telecommunications Operators Course". [7]

[1] National Civil Protection Authority. 2013. "National Plan for Emergencies of Civil Protection (Plano Nacional de Emergência de Proteção Civil)". [http://www.prociv.pt/bk/RISCOSPREV/Documents/Componentes_p%C3%BAblicas.pdf]. Accessed 2 October 2020.
[2] General Directorate of Health. 2007. "National Contingency Plan of the Health Sector for the Flu Pandemic (Plano de Contingência Nacional do Sector da Saúde para a Pandemia de Gripe)". [https://www.dgs.pt/documentos-e-publicacoes/plano-de-contingencia-nacional-do-sector-da-saude-para-a-pandemia-de-gripe-pdf.aspx]. Accessed 2 October 2020.
[3] General Directorate of Health. 2015. "National Contingency Plan of the Health Sector for Ebola Virus Disease (Plano de Contingência Nacional do Setor da Saúde para a Doença por Vírus ébola)". [http://www.ebola.dgs.pt/materiais1/ficheiros/plano-de-contingencia-pdf.aspx]. Accessed 2 October 2020.
[4] Portuguese Institute of Blood and Transplants. 2014. "Plano Nacional de Emergência para Eventos com Potencial Impacto na Missão do IPST". [http://www.ipst.pt/files/IPST/INTRUMENTOS_GESTAO/PO.51.1.1_Plano_de_Emergencia.pdf]. Accessed 2 October 2020.
[5] General Directorate of Health. March 2020. "National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19) (Plano Nacional de Preparação e Resposta à Doença por novo coronavírus (COVID-19))". [https://covid19.min-saude.pt/wp-content/uploads/2020/03/Plano-de-Conting%C3%AAncia-Novo-Coronavirus_Covid-19.pdf]. Accessed 2 October 2020.
[6] National Service of Health. "Centre for Public Health Emergencies (Centro de Emergências em Saúde Pública)". [https://www.sns.gov.pt/sns/centro-de-emergencias-em-saude-publica/]. Accessed 2 October 2020.
[7] Global Health Security Agenda. 2015. "Global Health Security Pilot Assessment of Portugal: April 12 to 17, 2015". [https://www.ebola.dgs.pt/documentos-diversos/avaliacoes-externas-documento-ghsa-pdf.aspx]. Accessed 2 October 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: 1

There is evidence that Portugal's communication plan designates a specific position within the government to serve as the primary spokesperson to the public during a public health emergency. The National Plan for Emergencies of Civil Protection of 2013, on page 139, recognizes the role of a spokesperson and states that the director of the Plan will nominate someone to be the designated spokesperson during a crisis. [1]

[1] National Civil Protection Authority. 2013. "National Plan for Emergencies of Civil Protection (Plano Nacional de Emergência de Proteção Civil)". [http://www.prociv.pt/bk/RISCOSPREV/Documents/Componentes_p%C3%BAblicas.pdf]. Accessed 4 October 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 Portugal uses media platforms to inform the public about public health emergencies. According to the Global Health Security Agenda Pilot Assessment of Portugal in page 44, a communication plan for public health emergency exists and it includes: "Media products include a specific website; fliers and posters; and television and radio spots. Online information management includes website, social networks and ePORTUGUÊSE; banner on other agencies' websites; and usage of the PDS - Health Data Platform." [1] According to the National Plan for Emergencies of Civil Protection, the activation and deactivation of the plan is done by national communication organs and through the official website, www.prociv.pt. [2; page 17] Communication via media platforms are also outlined in the plan for the flu, for ebola virus disease and in the Portuguese Institute of Bloods and Transplant's emergency plan. [3][4][5] The National Civil Protection Authority (ANPC) has a Twitter account and a Facebook account, both of which are active. [6][7] Prior to the COVID-19 pandemic, the ANPC has posted regularly on several issues related to public emergencies, mostly on natural disasters such as fires or earthquakes, but there has been a few posts on health. [8][9] No evidence has been found in the ANPC's Twitter or Facebook accounts that they have dispelled rumors, misinformation or disinformation.

[1] Global Health Security Agenda. 2015. "Global Health Security Pilot Assessment of Portugal: April 12 to 17, 2015". [https://www.ebola.dgs.pt/documentos-diversos/avaliacoes-externas-documento-ghsa-pdf.aspx]. Accessed 2 October 2020.
[2] National Civil Protection Authority. 2013. "National Plan for Emergencies of Civil Protection (Plano Nacional de Emergência de Proteção Civil)". [http://www.prociv.pt/bk/RISCOSPREV/Documents/Componentes_p%C3%BAblicas.pdf]. Accessed 2 October 2020.
[3] General Directorate of Health. 2007. "National Contingency Plan of the Health Sector for the Flu Pandemic (Plano de

Contingência Nacional do Sector da Saúde para a Pandemia de Gripe)". [https://www.dgs.pt/documentos-e-publicacoes/plano-de-contingencia-nacional-do-sector-da-saude-para-a-pandemia-de-gripe-pdf.aspx]. Accessed 2 October 2020.
[4] General Directorate of Health. 2015. "National Contingency Plan of the Health Sector for Ebola Virus Disease (Plano de Contingência Nacional do Setor da Saúde para a Doença por Vírus Ébola)".
[http://www.ebola.dgs.pt/materiais1/ficheiros/plano-de-contingencia-pdf.aspx]. Accessed 2 October 2020.
[5] Portuguese Institute of Blood and Transplants. 2014. "National Emergency Plan for Events of High Impact on IPST's Mission (Plano Nacional de Emergência para Eventos com Potencial Impacto na Missão do IPST)".
[http://www.ipst.pt/files/IPST/INTRUMENTOS_GESTAO/PO.51.1.1_Plano_de_Emergencia.pdf]. Accessed 2 October 2020.
[6] Twitter. "National Civil Protection Authority (Autoridade Nacional de Emergência e Proteção Civil)".
[https://twitter.com/proteccaocivil?lang=en]. Accessed 2 October 2020.
[7] Facebook. "National Civil Protection Authority (Autoridade Nacional de Proteção Civil)".
[https://www.facebook.com/AutoridadeNacionalEmergenciaProtecaoCivil/]. Accessed 2 October 2020.
[8] Twitter. 17 August 2018. "National Civil Protection Authority (Autoridade Nacional de Proteção Civil)".
[https://twitter.com/ProteccaoCivil/status/1030403305606967296]. Accessed 2 October 2020.
[9] Facebook. 19 September 2018. "National Civil Protection Authority (Autoridade Nacional de Proteção Civil)".
[https://www.facebook.com/AutoridadeNacionalEmergenciaProtecaoCivil/posts/10156226361713183]. Accessed 2 October 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 of the government have shared misinformation or disinformation on infectious diseases in the past two years. No evidence was found in major news sources on misinformation or disinformation shared by President Marcelo Rebelo de Sousa (2016-present), Prime-Minister António Costa (2015-present), Minister of Health Marta Temido (2018-present), or Minister of Health Adalberto Campos Fernandes (2015-2018). [1][2]

[1] Observador website. [https://observador.pt/]. Accessed 3 October 2020.
[2] Diário de Notícias website. [https://www.dn.pt/]. Accessed 3 October 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: 75.35

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: 116.46

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: 6.0

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: 5.0

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

There is evidence that within the last two years export restrictions were imposed on medical goods due to an infectious disease outbreak. Portugal is part of the European Union; therefore, trade regulations fall under the jurisdiction of European authorities. In March 2020, the European Commission (EC) issued a temporary export restriction on personal protective equipment (PPE) for a period of six weeks, which was later extended for another 30 days. [1] European Commission Regulation 402 of 14 March 2020 required export authorisation for PPE products that are destined to go outside the EU. [2] On 19 March 2020, the EC amended the regulation to allow exports of PPE to members of the European Free-Trade Area without the need of authorization. [3,4] Products that required export authorization were protective spectacles and visors, face shields, mouth-nose-protection equipment, protective garments and gloves. The resolution clearly states in its preambulatory clauses that the justification for those trade restrictions is the outbreak of the COVID-19 pandemic. [2]

[1] Global Trade Alert. 15 March 2020. "EU: Temporary export licensing requirement imposed on certain personal protective equipment including protective masks, gloves and garments in response to COVID-19". [https://www.globaltradealert.org/state-act/43486/eu-temporary-export-licensing-requirement-imposed-on-certain-personal-protective-equipment-including-protective-masks-gloves-and-garments-in-response-to-covid-19]. Accessed 3 October 2020.
[2] European Commission. 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/EN/TXT/?uri=uriserv:OJ.LI.2020.077.01.0001.01.ENG&toc=OJ:L:2020:077I:TOC]. Accessed 3 October 2020.
[3] Global Trade Alert. 20 March 2020. " EU: Exports of certain personal protective equipment to EFTA countries and other territories exempted from licensing requirements". [https://www.globaltradealert.org/state-act/43506/eu-exports-of-certain-personal-protective-equipment-to-efta-countries-and-other-territories-exempted-from-licensing-requirements]. Accessed 3 October 2020.
[4] European Commission. Commission Implementing Regulation (EU) 2020/426 of 19 March 2020 amending Implementing Regulation (EU) 2020/402 making the exportation of certain products subject to the production of an export authorisation. [https://eur-lex.europa.eu/eli/reg_impl/2020/426/oj]. Accessed 3 October 2020.

3.7.1b

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

Yes = 0 , No = 1

Current Year Score: 1

There is no evidence that Portugal issued a restriction on the export/import of non-medical goods to/from another country, stating that was due to the risk posed by an infectious disease outbreak. No evidence was found in the websites of the Ministry of Health and Ministry of Foreign Affairs. [1][2] No evidence was found in the Global Trade Alert website, which compiles any policy action related to trade around the globe. [3]

[1] Ministry of Health. "Press releases (Comunicados)". [https://www.portugal.gov.pt/pt/gc21/area-de-governo/saude#comunicados]. Accessed 3 October 2020.
[2] Ministry of Foreign Affairs. "Press communication (Comunicados de imprensa)". [https://www.portaldiplomatico.mne.gov.pt/comunicacao-e-media/comunciados-de-imprensa]. Accessed 3 October 2020.
[3] Global Trade Alert. "Portugal". [https://www.globaltradealert.org/country/166/period-from_20200101/period-to_20211003/base-date_announcement]. Accessed 3 October 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

There is evidence that within the last two years there were travel bans in Portugal due to an infectious disease outbreak. In March 2020, due to the outbreak of the COVID-19 pandemic, the European Union, of which Portugal is a member, imposed travel restrictions on any peron who is not a EU national, long-term resident or essential worker. [1] The travel restrictions were gradually lifted starting in June 2020. [2]

[1] European Commission. 16 March 2020. Communication from the Commission to the European Parliament, the European Council and the Council on COVID-19: Temporary Restriction on Non-Essential Travel to the EU. [https://ec.europa.eu/transparency/regdoc/rep/1/2020/EN/COM-2020-115-F1-EN-MAIN-PART-1.PDF]. Accessed 3 October 2020.
[2] European Commission. June 2020. "Travel during the coronavirus pandemic". [https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/travel-during-coronavirus-pandemic_en]. Accessed 3 October 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: 512.4

2017

WHO; national sources

4.1.1b

Nurses and midwives per 100,000 people

Input number

Current Year Score: 697.46

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 evidence that Portugal has a public workforce strategy in place to identify fields where there is an insufficient workforce and strategies to address these shortcomings. The "Global Health Security Agenda Pilot Assessment of Portugal" of 2015 notes in page 34 that "there is no national program, no strong incentives and no human-resource strategy for [epidemiological training for professionals]". [1] In addition, the same document in page 34 recommends: "Given the fact that Portugal is a centralized country, a national human resource strategy for epidemiological expertise could strengthen the country's capability to detect and respond to public health threats". [1] This suggests that there is no public health workforce strategy. Furthermore, in another 2016 study by Khoroshylova on "Developing tools to assist the planning of the Healthcare Workforce, with application to the Portuguese National Health Service", the author notes in page 5 that "Few normative studies developed to support strategic workforce planning in healthcare are published. Most of this type of studies are found in other fields of application." [2] In addition, according to the World Health Organization published in 2010 an Evaluation of the National Health Plan Of Portugal 2004-2010, in page 13, "The problems pertaining to human resources for health reflect a relative lack of long-term policy and planning in the past". [3] This suggests that there is no workforce strategic plan in place. More recent reports of the type were not found. In the "National Plan of Health: Revision and Extension to 2020" of May 2015, there are objectives to create a plan to address the health workforce in page 24, but there are no mentions of a strategy to identify fields where there is an insufficient workforce and strategies to address these shortcomings. [4] In the report "Portrait of Health 2018" by the National Service of Health of the Ministry of Health, there is a profile of the number and types of medical professionals in Portugal; however, there is no examination or indication of any study that identify fields where there is an insufficient workforce nor are there strategies to address these shortcomings. [5] No other information was available in the websites of the Ministry of Labour, Solidarity and Social Security and the Ministry of Education. [6][7]

[1] Global Health Security Agenda. 2015. "Global Health Security Pilot Assessment of Portugal: April 12 to 17, 2015". [https://www.ebola.dgs.pt/documentos-diversos/avaliacoes-externas-documento-ghsa-pdf.aspx]. Accessed 3 October 2020.
[2] Khoroshylova, D. October 2016. "Developing tools to assist the planning of the Healthcare Workforce, with application to the Portuguese National Health Service". University of Lisbon. [https://fenix.tecnico.ulisboa.pt/downloadFile/1407770020545073/Resumo%20Final.pdf]. Accessed 3 October 2020.
[3] World Health Organization. 2010. "WHO Evaluation of the National Health Plan Of Portugal (2004-2010)". [http://www.euro.who.int/__data/assets/pdf_file/0003/83991/E93701.pdf]. Accessed 3 October 2020.
[4] General Directorate of Health. May 2015. "National Plan of Health: Revision and Extension to 2020 (Plano Nacional de Saúde: Revisão e Extensão a 2020)". [http://www2.insa.pt/sites/INSA/Portugues/ComInf/Noticias/Documents/2015/Junho/PNS-2020.pdf]. Accessed 3 October 2020.
[5] National Service of Health. 2018. "Portrait of Health 2018 (Retrato da Saúde 2018)". [https://www.sns.gov.pt/wp-content/uploads/2018/04/RETRATO-DA-SAUDE_2018_compressed.pdf]. Accessed 3 October 2020.
[6] Ministry of Labour, Solidarity and Social Security. "Documents (Documentos)".

[https://www.portugal.gov.pt/pt/gc21/area-de-governo/trabalho-solidariedade-e-seguranca-social#documentos]. Accessed 3 October 2020.
[7] Ministry of Education. "Documents (Documentos)". [https://www.portugal.gov.pt/pt/gc21/area-de-governo/educacao#documentos]. Accessed 3 October 2020.

4.1.2 Facilities capacity

4.1.2a

Hospital beds per 100,000 people

Input number

Current Year Score: 345

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

There is evidence that Portugal has the capacity to isolate patients with highly communicable diseases in a patient isolation facility. Hospital Curry Cabral in Lisbon has an Internment Unit with capacity for 14 rooms with negative pressure isolation, a national reference facility for pandemics such as influenza and ebola virus. [1] In addition, the Ministry of Health and the National Institute of Health (INSA) have created a comprehensive document with recommendations on precautions in cases of patients in isolation. [2] During the COVID-19 pandemic, the government of Portugal identified the Hospital of Faro, Santa Maria, Curry Cabral, Dona Estefânia, São João, Anto António, Pedro Hispano, Braga, Guarda and Hospital and University Center of Coimbra, as being facilities that could take in COVID-19 patients. [3]

[1] National Service of Health. "Hospital Curry Cabral". [http://www.chlc.min-saude.pt/hospital-curry-cabral/]. Accessed 3 October 2020.
[2] Ministry of Health. "Recomendações para as precauções de isolamento: Precauções básicas e dependentes das vias de transmissão". [https://www.dgs.pt/programa-nacional-de-controlo-da-infeccao/documentos/orientacoes--recomendacoes/recomendacoes-para-as-precaucoes-de-isolamento-precaucoes-basicas-e-precaucoes-dependentes-das-vias-de-transmissao-em-revisao-pdf.aspx]. Accessed 3 October 2020.
[3] National Service of Health. "COVID-19: Reference hospitals (COVID-19 Hospitais de referência)". [https://www.sns.gov.pt/noticias/2020/03/10/covid-19-hospitais-de-referencia-2/]. Accessed 3 October 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 Portugal has demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak in the past two years. However, there is no evidence that Portugal has developed, updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak in the past two years.

In response to the COVID-19 pandemic, the municipal government of Porto built a temporary hospital with 300 beds to relieve some of the pressure on its main public hospitals and it has capacity to host COVID-19 patients in isolation. [1] Lisbon also built a temporary hospital with capacity for 500 beds, which was used to host non-COVID-19 patients, allowing COVID-19 patients to be treated in its hospitals and relieving some of the pressure on its public health system. [2] Other temporary hospitals were built across the country for COVID-19 patients, such as in the Algarve region, which has 100 beds. All COVID-19 dedicated beds have isolation capacity. [3] The National Plan for Preparation and Response to the Disease caused by the New Coronavirus of 2020 does not provide guidance on expansion of isolation capacity in the country. [4]

[1] Sá Ferreira, Paulo. JPN. 31 March 2020. "COVID-19: Rosa Mota Pavillion transformed in temporary hospital with 300 beds (COVID-19: Pavilhão Rosa Mota transformado em hospital temporário com 300 camas)". [https://www.jpn.up.pt/2020/03/31/covid-19-pavilhao-rosa-mota-transformado-em-hospital-temporario-com-300-camas/]. Accessed 7 April 2021.
[2] Pincha, João Pedro. Publico. 25 March 2020. "Lisbon prepares temporary hospital with 500 beds (Lisboa prepara hospital de campanha com 500 camas)". [https://www.publico.pt/2020/03/25/local/noticia/lisboa-prepara-hospital-campanha-500-camas-1909318]. Accessed 7 April 2021.
[3] Estado de Minas. 10 February 2021. "Multi-use pavillion transformed into temporary hospital in Portugal (Pavilhão polivalente transformado em hospital de campanha em Portugal)". [https://www.em.com.br/app/noticia/internacional/2021/02/10/interna_internacional,1236665/pavilhao-polivalente-transformado-em-hospital-de-campanha-em-portugal.shtml]. Accessed 7 April 2021.
[4] General Directorate of Health. March 2020. "National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19) (Plano Nacional de Preparação e Resposta à Doença por novo coronavírus (COVID-19))". [https://covid19.min-saude.pt/wp-content/uploads/2020/03/Plano-de-Conting%C3%AAncia-Novo-Coronavirus_Covid-19.pdf]. Accessed 7 April 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

Portugal has a national procurement system in place, which is managed through the web portal "acinGov" by Vortal. It is a centralised system that compiles all procurement requests and electronically organises proposals and also facilitates the online auction of government contracts. [1] In addition, both the National Institute of Health (INSA) and the General Directorate of Food and Veterinary (DGAV) have published on their websites the procurement protocols in place to acquire equipment needs, including laboratory and medical supplies. The Contracting Sector under the Directorate of Technical Resources of the INSA is responsible for procuring goods and services to be used by INSA, which includes laboratory and medical supplies. [2] Its responsibilities are aligned with Ordinance number 162 of 2012, which establishes the responsibilities of INSA and its departments and sectors. [3] On the website of INSA, there is a form that private sector entities can fill in to obtain further information on how to become a supplier to INSA. [2] There is no evidence that INSA uses the acinGov webportal as there is no link to the centralized system. The guide that the DGAV provides describes how to use the acinGov online procurement portal. [4]

[1] acinGov. "Characteristics (Características)". [https://www.acingov.pt/acingovprod/2/index.php/zonaPublica/zona_publica_c/indexCarateristicas]. Accessed 4 October 2020.
[2] National Institute of Health. "Contracting sector (Sector da Contratualização)". [http://www2.insa.pt/sites/INSA/Portugues/QuemSomos/Organograma/RecursosTecnicos/Paginas/SectorContratualizacao.aspx]. Accessed 4 October 2020.
[3] Ministries of Finance and Health. Ordinance number 162 of 2012. [http://repositorio.insa.pt/bitstream/10400.18/1796/3/Coletanea%20de%20Legisla%C3%A7%C3%A3o%20INSA_2013.pdf]. Accessed 4 October 2020.
[4] Vortal. "User guide for initiating the process for public procurement January 2010 (Guia de Utilização Lançamento de um Procedimento por Concurso Público Janeiro 2010)". [http://www.dgv.min-agricultura.pt/xeov21/attachfileu.jsp?look_parentBoui=248144&att_display=n&att_download=y]. Accessed 4 October 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: 1

There is some evidence that Portugal has a stockpile of medical supplies, which includes MCMs, medicines, vaccines, medical equipment and PPE, for national use during a public health emergency but limited information on what it includes.

At the beginning of the COVID-19 public health emergency, no evidence was found that Portugal had a stockpile of medical supplies. In March 2020, the European Commission announced that it will be conducting procurement to obtain medical supplies for its members. The supplies include masks, gloves, protection goggles, face shields and protective garments. [1] In April, State Secretary of Health, António Lacerda Sales, announced that 24M surgical masks would be arriving into the country throughout the month. He also announced that there were 100 local companies with capacity to produce materials to combat COVID-19. [2]

On 29 March 2020, the General Directorate of Health published instructions on the use of PPE. The instruction was to minimize the need to use PPE, so that it would not strain the supply of those materials. There was no indication in the directive of any stockpile of medical supplies. [3] No other evidence was found in the websites of the General Directorate of

Health, the National Service of Health or the Ministry of National Defense. [4,5,6] However, it must be noted that the European Union has implemented a mechanism in 2019 that creates reserves of a variety of resources, including medical supplies, for times of crisis and public emergencies. As Portugal is a member of the EU, it would be able to tap into those reserves. [7]

The National Authority of Medications and Health Products (INFARMED) is responsible for monitoring the supply of all medical goods, including medical supplies, laboratory supplies and medical countermeasures. Their website suggests that information on stockpiling is collected, but it is not available to the public. [8] It must be noted that Portugal had passed through a period of short supply of MCMs. A report by the Association of Pharmaceutical Commerce of the State of Rio de Janeiro (Brazil) stated that pharmacies In Portugal were in short supply of medications in 2018. The volume of medications that were in short supply in pharmacies summed up to 64M units, up 32.8% from 48.3M in 2017. [9]

[1] European Commision. 24 March 2020. "Coronavirus: Commission initiative to ensure successful personal protective equipment supply to EU (Coronavírus: iniciativa da Comissão para assegurar fornecimento de equipamento de proteção individual para UE coroada de êxito)". [https://ec.europa.eu/portugal/news/coronavirus-EC-bid-to-ensure-supply-of-personal-protective-equipment-for-the-EU-proves-successful_pt]. Accessed 4 October 2020.
[2] National Service of Health. 3 April 2020. "Covid-19 | Protection equipment (Covid-19 | Equipamento de proteção)". [https://www.sns.gov.pt/noticias/2020/04/03/covid-19-equipamento-de-protecao/]. Accessed 4 October 2020.
[3] General Directorate of Health. 29 March 2020. Normative 7/2020. "SARS-CoV-2 Infection Prevention and Control (COVID-19): Personal Protective Equipment (PPE) (Prevenção e Controlo de Infeção por SARS-CoV-2 (COVID-19): Equipamentos de Proteção Individual (EPI))". [https://www.dgs.pt/directrizes-da-dgs/normas-e-circulares-normativas/norma-n-0072020-de-29032020-pdf.aspx]. Accessed 4 October 2020.
[4] General Directorate of Health website. [https://www.dgs.pt/]. Accessed 4 October 2020.
[5] National Service of Health website. [https://www.sns.gov.pt/]. Accessed 4 October 2020.
[6] Ministry of National Defence. "Documents (Documentos)". [https://www.defesa.gov.pt/pt/comunicacao/documentos/Paginas/default.aspx]. Accessed 4 October 2020.
[7] European Commission. "rescEU". [https://ec.europa.eu/echo/what/civil-protection/resceu_en]. Accessed 4 October 2020.
[8] National Authority of Medications and Health Products. "Medical supplies market monitoring (Monitorização do mercado de dispositivos médicos)". [https://www.infarmed.pt/web/infarmed/entidades/dispositivos-medicos/monitorizacao-do-mercado-de-dispositivos-medicos]. Accessed 4 October 2020.
[9] Association of Pharmaceutical Commerce of the State of Rio de Janeiro (Brazil). "Crisis in Portugal: medicines are lacking and pharmacies are in debt (Crise em Portugal: faltam medicamentos e farmácias estão endividadas)". [https://ascoferj.com.br/noticias/crise-em-portugal-faltam-medicamentos-e-farmacias-estao-endividadas/]. Accessed 4 October 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 that Portugal has a stockpile of laboratory supplies for national use during a public health emergency. No reference to laboratory supplies, including reagents and media, were found in major news sources or government websites. No evidence was found in the websites of the General Directorate of Health, the National Service of Health or the Ministry of National Defense. [1,2,3] However, it must be noted that the European Union has implemented a mechanism in 2019 that creates reserves of a variety of resources, including medical supplies, for times of crisis and public emergencies. As Portugal is

a member of the EU, it would be able to tap into those reserves. [4] The National Authority of Medications and Health Products (INFARMED) is responsible for monitoring the supply of all medical goods, including medical supplies, laboratory supplies and medical countermeasures. Their website suggest that information on stockpiling is collected, but it is not available to the public. [5] Laboratory supplies is included in their term "medical supplies", according to the codes they use, which include supplies for medical diagnostics. [6]

[1] General Directorate of Health website. [https://www.dgs.pt/]. Accessed 4 October 2020.
[2] National Service of Health website. [https://www.sns.gov.pt/]. Accessed 4 October 2020.
[3] Ministry of National Defence. "Documents (Documentos)". [https://www.defesa.gov.pt/pt/comunicacao/documentos/Paginas/default.aspx]. Accessed 4 October 2020.
[4] European Commission. "rescEU". [https://ec.europa.eu/echo/what/civil-protection/resceu_en]. Accessed 4 October 2020.
[5] National Authority of Medications and Health Products. "Medical supplies market monitoring (Monitorização do mercado de dispositivos médicos)". [https://www.infarmed.pt/web/infarmed/entidades/dispositivos-medicos/monitorizacao-do-mercado-de-dispositivos-medicos]. Accessed 4 October 2020.
[6] National Authority of Medications and Health Products. "CDM Codes (CDM Codificação)". [https://extranet.infarmed.pt/cdm/CdmPublic.aspx]. Accessed 4 October 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

Current Year Score: 0

There is insufficient evidence that Portugal conducts or requires an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency.

No evidence was found in the websites of the National Service of Health, General Directorate of Health, and the Ministry of Defence. [1][2][3] There is evidence, however, that there were studies made in the past that evaluated the stockpile of medical supplies. A 2018 study by the Health Studies and Evaluation Center (CEFAR) and the National Pharmacy Association (ANF) determined that there was a widespread shortage of medications. In 2018, 64m medication units were in shortage in the country. In the last month of December alone, there were 6m unit shortage across 1,938 pharmacies in the country. There is some evidence that the study is updated yearly as there is annual data from 2014 through 2018, but a 2019 or 2020 edition of the study could not be found. [4] Additionally, the CEFAR/ANF study is a private initiative and not an initiative from the government.

[1] National Service of Health website. [https://www.sns.gov.pt/]. Accessed 7 April 2021.
[2] General Directorate of Health website. [https://www.dgs.pt/]. Accessed 7 April 2021.
[3] Ministry of National Defence. "Documents (Documentos)". [https://www.defesa.gov.pt/pt/comunicacao/documentos/Paginas/default.aspx]. Accessed 7 April 2021.
[4] Association of the Pharmaceutical Commerce of the State of Rio de Janeiro (ASCOFERJ). 11 February 2019. "Crisis in Portugal: shortage of medications and pharmacies are in debt (Crise em Portugal: faltam medicamentos e farmácias estão endividadas)". [https://ascoferj.com.br/noticias/crise-em-portugal-faltam-medicamentos-e-farmacias-estao-endividadas/. Accessed 7 April 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 no evidence that Portugal has 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. However, there is evidence that Portugal has a plan/mechanism to procure medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) for national use during a public health emergency.

The National Plan of Health that is valid until 2020 makes no mention of a plan, agreement, or mechanism to leverage domestic manufacturing capacity to produce or to procure medical supplies, medications and MCMs for national use during a public health emergency. The Plan calls for the private sector to be involved, but it is framed in general terms and no specific information is given. [1] The National Plan for Emergencies of Civil Protection of 2013 makes no mention of a plan, agreement or mechanism to leverage domestic manufacturing capacity to produce or to procure medical supplies, medications and MCMs for national use during a public health emergency. The Plan recognizes the importance of the private sector and calls for use of both public and private resources to address a public emergency; however, no specific information is given. [2]

The National Plan for Preparation and Response to the Disease caused by the New Coronavirus of 2020 makes no mention of a plan, agreement, or mechanism to leverage domestic manufacturing capacity to produce or to procure medical supplies, medications and MCMs for national use during a public health emergency. It calls for the participation of the private sector, but it does not mention leveraging domestic manufacturing capacity or special procurement mechanisms. [3] It must be noted, however, that in April, State Secretary of Health, António Lacerda Sales, announced that there were 100 local companies with capacity to produce medical supplies to combat COVID-19. No other information on the issue was found. [4] No evidence was found in the websites of the General Directorate of Health, the National Service of Health or the Ministry of National Defense. [5,6,7]

Portugal has been part of the European Union (EU) Joint Procurement Agreement for Medical Countermeasures, which ensures that member states have access to medical countermeasures from abroad if necessary when a serious cross-border threat to health is registered. The agreement aims to "secure more equitable access to specific medical countermeasures and improved security of supply", as well as balancing prices for EU member states. It is also designed to ensure acquisition of vaccines, antivirals and medical countermeasures for serious cross-border threats to health [8].

[1] General Directorate of Health. May 2015. "National Plan of Health: Revision and Extension to 2020 (Plano Nacional de Saúde: Revisão e extensão a 2020)". [http://pns.dgs.pt/files/2015/06/Plano-Nacional-de-Saude-Revisao-e-Extensao-a-2020.pdf.pdf]. Accessed 4 October 2020.
[2] National Civil Protection Authority. 2013. "National Plan for Emergencies of Civil Protection (Plano Nacional de Emergência de Proteção Civil)". [http://www.prociv.pt/bk/RISCOSPREV/Documents/Componentes_p%C3%BAblicas.pdf]. Accessed 4 October 2020.
[3] General Directorate of Health. March 2020. "National Plan for Preparation and Response to the Disease caused by the

New Coronavirus (COVID-19) (Plano Nacional de Preparação e Resposta à Doença por novo coronavírus (COVID-19))".
[https://covid19.min-saude.pt/wp-content/uploads/2020/03/Plano-de-Conting%C3%AAncia-Novo-Coronavirus_Covid-19.pdf]. Accessed 4 October 2020.
[4] National Service of Health. 3 April 2020. "Covid-19 | Protection equipment (Covid-19 | Equipamento de proteção)".
[https://www.sns.gov.pt/noticias/2020/04/03/covid-19-equipamento-de-protecao/]. Accessed 4 October 2020.
[5] General Directorate of Health website. [https://www.dgs.pt/]. Accessed 4 October 2020.
[6] National Service of Health website. [https://www.sns.gov.pt/]. Accessed 4 October 2020.
[7] Ministry of National Defence. "Documents (Documentos)".
[https://www.defesa.gov.pt/pt/comunicacao/documentos/Paginas/default.aspx]. Accessed 4 October 2020.
[8] European Commission. "Joint Procurement Of Medical Countermeasures".
[https://ec.europa.eu/health/preparedness_response/joint_procurement_en]. Accessed 3 September 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 insufficient evidence that Portugal has a plan/agreement to leverage domestic manufacturing capacity to produce laboratory supplies for national use during a public health emergency or that there is a plan/mechanism to procure laboratory supplies for national use during a public health emergency. The National Plan of Health that is valid until 2020 makes no mention of a plan, agreement or mechanism to leverage domestic manufacturing capacity to produce or to procure laboratory supplies for national use during a public health emergency. The Plan calls for the private sector to be involved, but it is framed in general terms and no specific information is given. [1] The National Plan for Emergencies of Civil Protection of 2013 makes no mention of a plan, agreement or mechanism to leverage domestic manufacturing capacity to produce or to procure laboratory supplies for national use during a public health emergency. The Plan recognizes the importance of the private sector and calls for use of both public and private resources to address a public emergency; however, no specific information is given. [2] The National Plan for Preparation and Response to the Disease caused by the New Coronavirus of 2020 makes no mention of a plan, agreement or mechanism to leverage domestic manufacturing capacity to produce or to procure laboratory supplies for national use during a public health emergency. It calls for the participation of the private sector, but it does not mention leveraging domestic manufacturing capacity or special procurement mechanisms. [3] No evidence was found in the websites of the General Directorate of Health, the National Service of Health or the Ministry of National Defense. [4,5,6]

[1] General Directorate of Health. May 2015. "National Plan of Health: Revision and Extension to 2020 (Plano Nacional de Saúde: Revisão e extensão a 2020)". [http://pns.dgs.pt/files/2015/06/Plano-Nacional-de-Saude-Revisao-e-Extensao-a-2020.pdf.pdf]. Accessed 4 October 2020.
[2] National Civil Protection Authority. 2013. "National Plan for Emergencies of Civil Protection (Plano Nacional de Emergência de Proteção Civil)". [http://www.prociv.pt/bk/RISCOSPREV/Documents/Componentes_p%C3%BAblicas.pdf]. Accessed 4 October 2020.
[3] General Directorate of Health. March 2020. "National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19) (Plano Nacional de Preparação e Resposta à Doença por novo coronavírus (COVID-19))".
[https://covid19.min-saude.pt/wp-content/uploads/2020/03/Plano-de-Conting%C3%AAncia-Novo-Coronavirus_Covid-

19.pdf]. Accessed 4 October 2020.
[4] General Directorate of Health website. [https://www.dgs.pt/]. Accessed 4 October 2020.
[5] National Service of Health website. [https://www.sns.gov.pt/]. Accessed 4 October 2020.
[6] Ministry of National Defence. "Documents (Documentos)".
[https://www.defesa.gov.pt/pt/comunicacao/documentos/Paginas/default.aspx]. Accessed 4 October 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 insufficient evidence that Portugal has a plan, program, or guidelines in place for dispensing medical countermeasures (MCM) for national use during a public health emergency. The National Authority of Medications and Health Products has published norms on how to dispense medications and health products. The Dispensing Norms of 10 October 2019 outlines several types of dispensation and the required prescriptions. There are no mentions of dispensing during a public health emergency. [1] The National Plan of Health that is valid until 2020 makes no mention MCM dispensing. [2] The National Plan for Emergencies of Civil Protection of 2013 makes no mention of MCM dispensing. [3] The National Plan for Preparation and Response to the Disease caused by the New Coronavirus of 2020 makes no mention of MCM dispensing. [4] No evidence was found in the websites of the General Directorate of Health, the National Service of Health or the Ministry of National Defense. [5,6,7]

[1] National Authority of Medications and Health Products. 10 October 2019. "Rules on dispensing medicines and health products (Normas relativas à dispensa de medicamentos e produtos de saúde)".
[https://www.infarmed.pt/documents/15786/17838/Normas_Dispensa/4c1aea02-a266-4176-b3ee-a2983bdfe790]. Accessed 4 October 2020.
[2] General Directorate of Health. May 2015. "National Plan of Health: Revision and Extension to 2020 (Plano Nacional de Saúde: Revisão e extensão a 2020)". [http://pns.dgs.pt/files/2015/06/Plano-Nacional-de-Saude-Revisao-e-Extensao-a-2020.pdf.pdf]. Accessed 4 October 2020.
[3] National Civil Protection Authority. 2013. "National Plan for Emergencies of Civil Protection (Plano Nacional de Emergência de Proteção Civil)". [http://www.prociv.pt/bk/RISCOSPREV/Documents/Componentes_p%C3%BAblicas.pdf]. Accessed 4 October 2020.
[4] General Directorate of Health. March 2020. "National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19) (Plano Nacional de Preparação e Resposta à Doença por novo coronavírus (COVID-19))".
[https://covid19.min-saude.pt/wp-content/uploads/2020/03/Plano-de-Conting%C3%AAncia-Novo-Coronavirus_Covid-19.pdf]. Accessed 4 October 2020.
[5] General Directorate of Health website. [https://www.dgs.pt/]. Accessed 4 October 2020.
[6] National Service of Health website. [https://www.sns.gov.pt/]. Accessed 4 October 2020.
[7] Ministry of National Defence. "Documents (Documentos)".
[https://www.defesa.gov.pt/pt/comunicacao/documentos/Paginas/default.aspx]. Accessed 4 October 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 insufficient evidence that Portugal has the means to quickly receive health personnel from other countries in the event of a public health emergency. Portugal is a member of the European Centre for Disease Prevention and Control (ECDC), which has public health programmes, including for preparedness and response, scientific advice and coordination and threat detection. However, no specific plan or mechanism is mentioned to receive health personnel from other countries are mentioned. [1] Furthermore, the Global Health Security Agenda Pilot Assessment of Portugal explicitly notes in page 42 that, "The systems observed appeared capable of urgent mobilisation and deployment of public health and other appropriate personnel and resources to mitigate massive public health emergencies". [2] However, no evidence was found that there are facilitation of visas or travel requirements for medical personnel from other countries. Nevertheless, as part of the EU and the ECDC, visas and travel requirements from other EU/ECDC member countries are not an obstacle for medical personnel to enter Portugal. No other information was found in the websites for the Ministry of Health, Ministry of National Defence, or the Centre for Public Health Emergencies. [3][4][5] The National Plan for Preparation and Response to the Disease caused by the New Coronavirus of 2020 makes no mention of any plan to receive health professional from other countries. [6]

[1] European Centre for Disease Prevention and Control. "Public health networks". [https://www.ecdc.europa.eu/en/about-uswho-we-work/public-health-networks]. Accessed 3 October 2020.
[2] Global Health Security Agenda. 2015. "Global Health Security Pilot Assessment of Portugal: April 12 to 17, 2015". [https://www.ebola.dgs.pt/documentos-diversos/avaliacoes-externas-documento-ghsa-pdf.aspx]. Accessed 3 October 2020.
[3] Ministry of Health. "Documents (Documentos)". [https://www.portugal.gov.pt/pt/gc21/area-de-governo/saude#documentos]. Accessed 3 October 2020.
[4] Ministry of National Defence. "Documents (Documentos)". [https://www.defesa.gov.pt/pt/comunicacao/documentos/Paginas/default.aspx]. Accessed 3 October 2020.
[5] General Directorate of Health. "Centre for Public Health Emergencies (Centro de Emergências em Saúde Pública)". [https://www.dgs.pt/a-dgs/direcao-e-organica/unidade-de-apoio-a-autoridade-de-saude-nacional-e-a-gestao-de-emergencias-em-saude-publica/centro-de-emergencias-em-saude-publica.aspx]. Accessed 3 October 2020.
[6] General Directorate of Health. March 2020. "National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19) (Plano Nacional de Preparação e Resposta à Doença por novo coronavírus (COVID-19))". [https://covid19.min-saude.pt/wp-content/uploads/2020/03/Plano-de-Conting%C3%AAncia-Novo-Coronavirus_Covid-19.pdf]. Accessed 2 October 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: 98.9

2015

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: 803.21

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: 1

There is evidence that the government issued statements committing to provide prioritised health care services to healthcare workers who become sick as a result of responding to a public health emergency. The general emergency plan

does not make this commitment, but it is present in the disease-specific plan for influenza. The contingency plan for influenza has specific and special procedures for health professionals who are exposed to disease during the provision of health care services. In the contingency plan for influenza (page 83), medical professionals are identified as a priority group, owing to their ability to assist in a public health emergency. Therefore, they are given priority access to healthcare services and medication. [1] The contingency plan for ebola virus disease (page 17) recognizes that medical professionals are at the greatest risk of exposure to the disease; therefore, it makes special provisions for those workers healthcare in terms of prevention training and proper equipment. Yet, specific provisions for prioritised health care services are not explicitly mentioned. [2] The National Plan for Emergencies of Civil Protection, which is the general emergency plan, while it considers biological threats, it does not specifically mention that it will provide prioritized health care services to healthcare workers who become sick as a result of responding to a public health emergency. [3] No other information was found in the website of the Ministry of Health. [4] The 2020 National Plan for Preparation and Response to the Disease caused by the New Coronavirus commits to provide healthcare workers priority healthcare service if they fall ill as a result of the public health emergency. In page 41 of the plan, the plan recognizes the risk that healthcare providers run and then refers the WHO procedures on how to assess potential risk factors among health care workers. The design plan is aligned with WHO's recommendation. [5]

[1] General Directorate of Health. 2007. "National Contingency Plan of the Health Sector for the Flu Pandemic (Plano de Contingência Nacional do Sector da Saúde para a Pandemia de Gripe)". [https://www.dgs.pt/documentos-e-publicacoes/plano-de-contingencia-nacional-do-sector-da-saude-para-a-pandemia-de-gripe-pdf.aspx]. Accessed 3 October 2020.
[2] General Directorate of Health. 2015. "National Contingency Plan of the Health Sector for Ebola Virus Disease (Plano de Contingência Nacional do Setor da Saúde para a Doença por Vírus Ébola)". [http://www.ebola.dgs.pt/materiais1/ficheiros/plano-de-contingencia-pdf.aspx]. Accessed 3 October 2020.
[3] National Civil Protection Authority. 2013. "National Plan for Emergencies of Civil Protection (Plano Nacional de Emergência de Proteção Civil)". [http://www.prociv.pt/bk/RISCOSPREV/Documents/Componentes_p%C3%BAblicas.pdf]. Accessed 3 October 2020.
[4] Ministry of Health. "Documents (Documentos)". [https://www.portugal.gov.pt/pt/gc21/area-de-governo/saude#documentos]. Accessed 3 October 2020.
[5] General Directorate of Health. March 2020. "National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19) (Plano Nacional de Preparação e Resposta à Doença por novo coronavírus (COVID-19))". [https://covid19.min-saude.pt/wp-content/uploads/2020/03/Plano-de-Conting%C3%AAncia-Novo-Coronavirus_Covid-19.pdf]. Accessed 3 October 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 a system is in place for public health officials and healthcare workers to communicate during a public health emergency.

Although Portugal does have a system to keep medical professionals informed and communicable during public health emergencies, it is specific to the ebola virus disease and there is no evidence that this system is used for other diseases. According to the contingency plan for ebola virus disease, health workers can contact the General Directorate of Health through a direct line, the Medical Support Line, to obtain the latest information and to receive instructions on procedures and priorities. [1] There is no other evidence of the Medical Support Line in other sources, including the Ministry of Health. [2][3] The communication plan described in the ebola virus disease plan mentions only ebola virus disease and makes no reference to applicability to other diseases. The document mentions (page 29) that "The Communication Plan is a dynamic document, such that all measures and developed actions are flexible and adaptable to the evolution of the epidemic [ebola virus disease] to the international level and its impact on health and the population". [2] The phrasing does not imply that the flexibility or adaptability of the plan extends to other diseases. The Medical Support Line described in the ebola virus disease plan provides health professionals a way to communicate with authorities of any suspected cases or outbreaks, including if the health professional themselves believe they have been infected, according to page 32. [2]

The Global Health Security Agenda Pilot Assessment of Portugal (page 42) explicitly states: "Substantial capacity in communications and secure communication was demonstrated across the National Civil protection Authority and Health system with appropriate consideration given to resilience in the event of loss of normal civilian communications including the internet and cellular phone networks, and failure of civilian electrical supply. It is probably that this sustained capacity would permit deployment of Public health and medical Personnel effectively end in the circumstance of massive disruption to infrastructure."[2] The National Plan for Preparation and Response to the Disease caused by the New Coronavirus of 2020 has a section on internal communication in page 38; however, it is broadly outlined, as it calls for another communication plan to be created with details on the mechanism and system to be implemented. In addition, there is no indication that the plan can be replicated for other public health emergencies. [5]

[1] General Directorate of Health. 2015. "National Contingency Plan of the Health Sector for Ebola Virus Disease (Plano de Contingência Nacional do Setor da Saúde para a Doença por Vírus Ébola)". [http://www.ebola.dgs.pt/materiais1/ficheiros/plano-de-contingencia-pdf.aspx]. Accessed 3 October 2020.
[2] Ministry of Health. "Documents (Documentos)". [https://www.portugal.gov.pt/pt/gc21/area-de-governo/saude#documentos]. Accessed 3 October 2020.
[3] National Service of Health. "General Support Lines (Linhas de Atendimento Gerais)". [https://www.sns.gov.pt/sns-saude-mais/linhas-de-atendimento-gerais/]. Accessed 3 October 2020.
[4] Global Health Security Agenda. 2015. "Global Health Security Pilot Assessment of Portugal: April 12 to 17, 2015". [https://www.ebola.dgs.pt/documentos-diversos/avaliacoes-externas-documento-ghsa-pdf.aspx]. Accessed 3 October 2020.
[5] General Directorate of Health. March 2020. "National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19) (Plano Nacional de Preparação e Resposta à Doença por novo coronavírus (COVID-19))". [https://covid19.min-saude.pt/wp-content/uploads/2020/03/Plano-de-Conting%C3%AAncia-Novo-Coronavirus_Covid-19.pdf]. Accessed 3 October 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 there exists a system for public health officials and healthcare workers to communicate during an emergency and that encompasses healthcare workers in both the public and private sector. Portugal has a system

to keep medical professionals informed and communicable during public health emergencies, but it was only included in the contingency plan for ebola virus disease and it is not present in broad-based disease plans. The contingency plan for ebola virus disease incorporates both the private and public sectors of healthcare. While the document does not specific mention that both private and public healthcare workers can use the Medical Support Line, the document, in pages 25-26, incorporates both public and private sector healthcare workers in other sections, such as in surveillance and reporting of cases. [1] Furthermore, the national contingency for influenza more clearly states (page 69) that the plan includes communication channels between all health service providers, public and private, as well as other relevant sectors to assist the population at the moment of crisis. [2] In addition, the Global Health Security Agenda Pilot Assessment of Portugal (page 42), explicitly states: "Substantial capacity in communications and secure communication was demonstrated across the National Civil protection Authority and Health system with appropriate consideration given to resilience in the event of loss of normal civilian communications including the internet and cellular phone networks, and failure of civilian electrical supply. It is probably that this sustained capacity would permit deployment of Public health and medical Personnel effectively end in the circumstance of massive disruption to infrastructure."[2] No other evidence was found in the website of the Ministry of Health. [4] The National Plan for Preparation and Response to the Disease caused by the New Coronavirus of 2020 has a section on internal communication in page 38; however, it is broadly outlined, as it calls for another communication plan to be created with details on the mechanism and system to be implemented. The section on internal communications makes no mention of public and private healthcare workers. In addition, there is no indication that the plan can be replicated for other public health emergencies. [5]

[1] General Directorate of Health. 2015. "National Contingency Plan of the Health Sector for Ebola Virus Disease (Plano de Contingência Nacional do Setor da Saúde para a Doença por Vírus Ébola)". [http://www.ebola.dgs.pt/materiais1/ficheiros/plano-de-contingencia-pdf.aspx]. Accessed 3 October 2020.
[2] General Directorate of Health. 2007. "National Contingency Plan of the Health Sector for the Flu Pandemic (Plano de Contingência Nacional do Sector da Saúde para a Pandemia de Gripe)". [https://www.dgs.pt/documentos-e-publicacoes/plano-de-contingencia-nacional-do-sector-da-saude-para-a-pandemia-de-gripe-pdf.aspx]. Accessed 3 October 2020.
[3] Global Health Security Agenda. 2015. "Global Health Security Pilot Assessment of Portugal: April 12 to 17, 2015". [https://www.ebola.dgs.pt/documentos-diversos/avaliacoes-externas-documento-ghsa-pdf.aspx]. Accessed 3 October 2020.
[4] Ministry of Health. "Documents (Documentos)". [https://www.portugal.gov.pt/pt/gc21/area-de-governo/saude#documentos]. Accessed 3 October 2020.
[5] General Directorate of Health. March 2020. "National Plan for Preparation and Response to the Disease caused by the New Coronavirus (COVID-19) (Plano Nacional de Preparação e Resposta à Doença por novo coronavírus (COVID-19))". [https://covid19.min-saude.pt/wp-content/uploads/2020/03/Plano-de-Conting%C3%AAncia-Novo-Coronavirus_Covid-19.pdf]. Accessed 3 October 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 evidence that Portugal is monitoring for and tracking the number of health care associated infections that take place in healthcare facilities.

Portugal has the initiative "Stop Infeção Hospitalar" (Stop Hospital Infections) together with Calouste Gulbekian Foundation. The initiative and the accompanying report is evidence that Portugal is monitoring for and tracking the number of health care associated infections that take place in healthcare facilities. [1][2] The report provides data on the number of cases and deaths by different types of healthcare associated infections, citing the General Directorate of Health (DGS) as the source. [2] The initiative's objective to monitor cases of hospital infections and to educate patients and medical professionals as well as to provide the necessary equipment to prevent healthcare associated infections. The initiative began in March 2015. [1] In addition to the Stop Hospital Infections program, Portugal, as a member of the OECD, is also monitored by the organization in this indicator. Among the 24 countries the OECD surveyed in the report "Health at a Glance 2019", Portugal ranks last in terms of HCAI. [3] Between 2015 and 2017, 8.1% of all hospital patients developed some kind of HCAI, compared to the OECD average of 4.9%. [4]

[1] National Service of Health. 8 May 2018. "Stop Hospital Infections (Stop Infeção Hospitalar)". [https://www.sns.gov.pt/noticias/2018/05/08/stop-infecao-hospitalar-3/]. Accessed 3 October 2020.
[2] Calouste Gulbekian Foundation, Government of Portugal. 2014. "Stop Hospital Infections (Stop Infeção Hospitalar)". [https://content.gulbenkian.pt/wp-content/uploads/2017/08/29200515/1-2-Cad-Broch-Stop-Infe%C3%A7%C3%A3o-Hospitalar-FCG_sem-miras.pdf]. Accessed 3 October 2020.
[3] OECD. "Health at a Glance 2019". [https://www.oecd-ilibrary.org/docserver/4dd50c09-en.pdf?expires=1601784037&id=id&accname=guest&checksum=E422962DDBF63C71725FF7850CD62F81]. Accessed 3 October 2020.
[4] JN. 7 November 2019. "Portugal with the highest rate of hospital infections (Portugal com a mais alta taxa de infeções hospitalares)". [https://www.jn.pt/nacional/portugal-com-a-mais-alta-taxa-de-infecoes-hospitalares-11488361.html]. Accessed 3 October 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 the Ethics Committee for Clinical Research (CEIC) that reviews requests for clinical trials in Portugal. It was created by Law number 21 of 2014 as an independent body composed of healthcare workers and other relevant sectors to protect, to guarantee the rights and well-being of participants in clinical research. [1] The CEIC makes transparent and available all the necessary norms to obtain approval for clinical trial in its website. [2]

[1] Ethics Committee for Clinical Research. "Mission (Missão)". [https://www.ceic.pt/missao]. Accessed 3 October 2020.
[2] Ethics Committee for Clinical Research. "Published documents (Documentos publicados)".

[https://www.ceic.pt/documentos-orientadores]. Accessed 3 October 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: 0

There is no evidence that there is an expedited process for approving clinical trials for unregistered medical countermeasures to treat ongoing pandemics by the Ethics Committee for Clinical Research (CEIC). The normative regulations for requests and clinical trial procedures do not make any mention of urgent requests. [1] There are no mechanisms during the requests for clinical trials that would prioritise unregistered medical countermeasures to treat ongoing pandemics. [1] The CEIC is the relevant agency and it is part of the Ministry of Health; therefore, there is no further evidence in the Ministry of Health. [2] There is no Ministry of Research in Portugal.

[1] Ethics Committee for Clinical Research. June 2005. "Normas a observar pelos requerentes sobre o formato e conteúdo do pedido de parecer à CEIC para a realização de ensaio clínico com medicamentos de uso humano, notificação/pedido de alterações, notificação de eventos adversos e declaração de fim de ensaio". [https://www.ceic.pt/documents/20727/57535/Instru%ff%ff%ff%ffes%2baos%2brequerentes%2bpara%2ba%2bSubmiss%ff%ffo%2bde%2bum%2bpedido%2bde%2bparecer%2b%ff%ff%2bCEIC/3a0005ae-5b1d-414c-8bee-701996fa1f78]. Accessed 3 October 2020.
[2] Ministry of Health. "Documents (Documentos)". [https://www.portugal.gov.pt/pt/gc21/area-de-governo/saude#documentos]. Accessed 3 October 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

Portugal has a government agency for approving new medical countermeasures for humans. The National Authority of Medicines and Health Products (INFARMED) is the government agency responsible for approving new medical countermeasures for humans. Among its responsibilities are: "Research, evaluation and authorisation of medicines; Quality, safety and efficacy control of medicines; [...] Research, assessment, registration, monitoring and supervision of health products; Clinical research evaluation, assessment and registration of CE marked medical devices, notification of health care products and market supervision activities". [1]

[1] National Authority of Medicines and Health Products. "About INFARMED". [http://www.infarmed.pt/web/infarmed-en/about-infarmed]. Accessed 3 October 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 public evidence that the National Authority of Medicines and Health Products (INFARMED) has an expedited process for approving medical countermeasures for human use during public health emergencies. INFARMED has three types of marketing authorisation, one of which includes authorisation for the exceptional use of medicinal products. [1] According to Article 92 of Law No. 176/2006 of 30 August (Decreto-Lei n.º 176/2006, de 30 de Agosto), INFARMED may authorise the use of medicinal products not processing any other authorisation when certain conditions are met, including when it is "necessary to prevent or limit the current or potential spread of pathogens, toxins, chemical agents, or nuclear radiation, harmful effects". [2]

[1] INFARMED. "Marketing Authorization (EUL, Batch AUE and SAR) (Autorização de comercialização (AUE, AUE de lote e SAR))". [http://www.infarmed.pt/web/infarmed/entidades/medicamentos-uso-humano/autorizacao-de-introducao-no-mercado/autorizacao_de_utilizacao_especial]. Accessed 3 October 2020.
[2] INFARMED. "Law No. 176/2006 of 30 August (Decreto-Lei n.º 176/2006, de 30 de Agosto)". [http://www.infarmed.pt/documents/15786/1068535/035-E_DL_176_2006_9ALT.pdf/d2ae048e-547e-4c5c-873e-b41004b9027f]. Accessed 3 October 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: 0

There is insufficient evidence that pandemics are included in Portugal's national risk reduction strategy and no standalone national disaster risk reduction strategy for pandemics was found. Portugal has the National Platform Disaster Risk Reduction (PNRRC), which is under the Sub-Commission of the National Commission for Civil Protection (CNPC), which is under the National Civil Protection Authority (ANPC). The PNRRC website does not publish a national plan, rather it clearly states that it is aligned with the Sendai Framework for Disaster Risk Reduction for 2015-2030 and the International Strategy for Disaster Reduction. [1] The Sendai framework includes pandemics and epidemics, but does not provide details. [2] The Sub-Commission of the CNPC which is responsible for the PNRRC includes the General Directorate of Health (DGS) and the National Institute of Medical Emergency, but this is insufficient evidence that pandemics and epidemics are incorporated in the national risk reduction strategy. [3] No further information on the issue was found the website of the National Civil Protection Authority or the Ministry of Health-National Service of Health. [4][5]

[1] National Platform Disaster Risk Reduction. [http://www.pnrrc.pt/]. Accessed 3 October 2020.
[2] United Nations. "Sendai Framework for Disaster Risk Reduction 2015-2030". [https://www.unisdr.org/files/43291_sendaiframeworkfordrren.pdf]. Accessed 3 October 2020.
[3] National Platform Disaster Risk Reduction. "Entidades Constituintes". [/]. Accessed 3 October 2020.
[4] National Civil Protection Authority. 2013. "National Plan for Emergencies of Civil Protection (Plano Nacional de Emergência de Proteção Civil)". [http://www.prociv.pt/bk/RISCOSPREV/Documents/Componentes_p%C3%BAblicas.pdf]. Accessed 3 October 2020.
[5] National Service of Health. "Centre for Public Health Emergencies (Centro de Emergências em Saúde Pública)". [https://www.sns.gov.pt/sns/centro-de-emergencias-em-saude-publica/]. Accessed 3 October 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

There is evidence that Portugal is part of a regional group that has a component that deals with public health emergencies. There is no evidence of gaps in its implementation. Portugal is part of the EU; therefore, it is also a member of the European Centre for Disease Prevention and Control (ECDC). As a member of the ECDC, Portugal has cross-border agreement with regards to public health emergencies. 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. No evidence was found for gaps in its implementation in the websites of relevant agencies, including the General Directorate of Health, the National Service of Health or the National Civil Protection Authority. [2,3,4]

[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 3 October 2020.
[2] National Service of Health website. [https://www.sns.gov.pt/]. Accessed 3 October 2020.
[3] General Directorate of Health website. [https://www.dgs.pt/]. Accessed 3 October 2020.
[4] National Civil Protection Authority website. [http://www.prociv.pt/en-us/Pages/default.aspx]. Accessed 3 October 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

There is evidence that Portugal is part of a regional group that has a component that deals with animal health emergencies. There is no evidence of gaps in its implementation. Portugal is part of the EU; therefore, it is also a member of the European Centre for Disease Prevention and Control (ECDC). As a member of the ECDC, Portugal has cross-border agreement with regards to public health emergencies, including those involving animal health. The ECDC has the food- and waterborne diseases and zoonoses Programme, which ensures regional cooperation in cases of animal health emergencies. [1] No evidence was found for gaps in its implementation in the websites of relevant agencies, including the General Directorate of Health, the National Service of Health or the National Civil Protection Authority. [2,3,4]

[1] European Centre for Disease Prevention and Control. "Food- and waterborne diseases and zoonoses". [https://www.ecdc.europa.eu/en/food-and-waterborne-diseases-and-zoonoses]. Accessed 3 October 2020.
[2] National Service of Health website. [https://www.sns.gov.pt/]. Accessed 3 October 2020.
[3] General Directorate of Health website. [https://www.dgs.pt/]. Accessed 3 October 2020.
[4] National Civil Protection Authority website. [http://www.prociv.pt/en-us/Pages/default.aspx]. Accessed 3 October 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 insufficient evidence that Portugal has allocated national funds to improve capacity to address epidemic threats within the past three years. Indeed, because of the economic crisis that lasted from 2010 through 2014, the government cut expenditures across the board to maintain some fiscal stability. Investments in health services were muted. According to an European Commission report on Portugal's health services in 2017, expenditures per head were below the regional average, EUR 1,989 in Portugal versus EUR 2,797 EU average. [1] No funds to improve national capacity to address epidemic threats were found in the State Budgets of 2017, 2018, 2019 and 2020. [2]

[1] European Commision. 2017. "State of Health in the EU: Portugal". [https://www.dgs.pt/em-destaque/o-estado-da-saude-na-uniao-europeia-pdf.aspx]. Accessed 4 October 2020.
[2] Government of Portugal. Law 42 of 28 December 2016. State Budget for 2017 (Orçamento do Estado para 2017). [https://www.dgo.gov.pt/politicaorcamental/OrcamentodeEstado/2017/Or%C3%A7amento%20Estado%20Aprovado/Documentos%20do%20OE/Lei_42_2016-OE2017_VersaoDR.pdf]. Accessed 4 October 2020.
[3] Government of Portugal. Law 114 of 29 December 2017. State Budget for 2018 (Orçamento do Estado para 2018). [https://www.dgo.gov.pt/politicaorcamental/OrcamentodeEstado/2018/Or%C3%A7amento%20Estado%20Aprovado/Documentos%20do%20OE/Lei_114_2017-OE2018_VersaoDR.pdf]. Accessed 4 October 2020.
[4] Government of Portugal. Law 71 of 31 December 2018. State Budget for 2019 (Orçamento do Estado para 2019). [https://www.dgo.gov.pt/politicaorcamental/OrcamentodeEstado/2019/Or%C3%A7amento%20Estado%20Aprovado/Documentos%20do%20OE/Lei_71_2018-OE2019_VersaoDR.pdf]. Accessed 4 October 2020.
[5] Government of Portugal. Law 2 of 31 March 2020. State Budget for 2020 (Orçamento do Estado para 2020). [https://www.dgo.gov.pt/politicaorcamental/OrcamentodeEstado/2020/Or%C3%A7amento%20Estado%20Aprovado/Documentos%20do%20OE/Lei_2_2020-OE2020_VersaoDR.pdf]. Accessed 4 October 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: 1

There is some evidence that Portugal has access to special emergency financing or funding mechanisms in the case of public health emergency. As a member state of the European Union (EU), Portugal has access to its Emergency Support Instrument (ESI), which could include public health emergencies if approved by the European Commission. In April 2020, the ESI was activated to responde to the COVID-19 outbreak. The ESI is not specific for COVID-19, as it can be used in other emergencies. [1] There is no evidence of a dedicated national reserve fund for public health emergencies in Portugal's annual budget. However, there is a Municipal Emergency Fund in Article 86 of the State Budget 2020, which could be used by municipalities to address public health emergencies. [2] Portugal is not eligible to the World Bank's Pandemic Emergency Financing Facility, as it is not part of the IDA. [3][4]

[1] European Commission. 23 June 2020. "Questions and Answers on Emergency Support Instrument". [https://ec.europa.eu/commission/presscorner/detail/en/QANDA_20_1164]. Accessed 3 October 2020.
[2] Assembly of the Republic. 2020. "Law 2 of 2020 on the State Budget 2020." [https://www.dgo.gov.pt/politicaorcamental/Paginas/OEpagina.aspx?Ano=2020&TipoOE=Or%c3%a7amento%20Estado%20Aprovado&TipoDocumentos=Lei%20/%20Mapas%20Lei%20/%20Relat%c3%b3rio]. Accessed 3 October 2020.
[3] World Bank. February 2019. "Pandemic Emergency Financing Facility (PEF): Operational Brief for Eligible Countries". [http://pubdocs.worldbank.org/en/134541557247094502/PEF-Operational-Brief-Feb2019.pdf]. Accessed 3 October 2020.
[4] International Development Association. "Borrowing Countries". [http://ida.worldbank.org/about/borrowing-countries].

Accessed 3 October 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 evidence that senior leaders in Portugal have made public commitments to support its own domestic capacity to address epidemic threats by providing financing and support in the past three years. Further, there is insufficient evidence that senior leaders in Portugal have made public commitments to support capacity in other countries to address epidemic threats. Portuguese international aid is usually targeted at other Portuguese-speaking countries. Minister of Health Adalberto Campos Fernandes visited Cape Verde in January 2018 and made public commitments to provide financial and technical support to improving public health systems, but this was not focused on epidemic threat preparedness. [1] Furthermore, Portugal has supported other countries, namely Mozambique and Guinea-Bissau, with improving their capacity on epidemiological surveillance, but this support was not made by any senior leader, rather it was representatives of the Portuguese National Insitute of Health. [2,3] On the other hand, in 2020, with the outbreak of the COVID-19 pandemic, the prime minister of Portugal, António Costa, announced in August 2020 that he would expand the budget for health by over EUR 1.3bn. The funds will be used to fight the pandemic, acquire vaccines when they are released, improve hospital equipment and capacity for those infected with the COVID-19 disease, and reinforce the National Service of Health's response to the pandemic. [3] No other evidence was found on public commitments by senior leaders on Portuguese international aid for epidemic-related issues were found in the websites of the Ministry of Health or the Ministry of Foreign Affairs. [4][5]

[1] National Institute of Health. 26 July 2018."Institute Ricardo Jorge supports National Institute of Health of Mozambique in area of epidemiological surveillance (Instituto Ricardo Jorge apoia Instituto Nacional de Saúde de Moçambique na área da vigilância epidemiológica)". [http://www.insa.min-saude.pt/instituto-ricardo-jorge-apoia-instituto-nacional-de-saude-de-mocambique-na-area-da-vigilancia-epidemiologica/]. Accessed 3 October 2020.
[2] National Institute of Health. 13 March 2018. "Institute Ricardo Jorge is in Guinea-Bissau to support laboratory and epidemiological capacitation on infectious diseases (Instituto Ricardo Jorge na Guiné-Bissau para apoiar capacitação laboratorial e vigilância epidemiológica de doenças infeciosas)". [http://www.insa.min-saude.pt/instituto-ricardo-jorge-na-guine-bissau-para-apoiar-capacitacao-laboratorial-e-vigilancia-epidemiologica-de-doencas-infeciosas/]. Accessed 3 October 2020.
[3] Government of Portugal. 20 August 2020. "Investment in health with unprecedented strengthening in 2020 (Investimento na saúde com reforço sem precedentes em 2020)". [https://www.portugal.gov.pt/pt/gc22/comunicacao/noticia?i=investimento-na-saude-com-reforco-sem-precedentes-em-2020]. Accessed 3 October 2020.
[4] Ministry of Health website. [https://www.portugal.gov.pt/pt/gc22/area-de-governo/saude]. Accessed 3 October 2020.
[5] Ministry of Foreign Affairs website. [https://www.portugal.gov.pt/pt/gc22/area-de-governo/negocios-estrangeiros].

Accessed 3 October 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

There is evidence that Portugal has provided other countries with financial and technical support to improve capacity to address epidemic threats in the past three years. There is also evidence that Portugal has received funds to improve its own domestic capacity to address epidemic threats to improve capacity in the past three years.

Portugal has sent personnel to both Mozambique and Guinea-Bissau to improve their capacity to address epidemiological threats. In July 2018, the National Institute of Health (INSA) of Portugal visited Mozambique to support analysis, research and data interpretation of epidemiological surveillance. [1] In March 2018, INSA visited Guinea-Bissau to help in the training of laboratory workers for epidemiological surveillance. [2] According to the GHS Tracking Dashboard, Portugal is mainly a donor but it has also received some funding to address epidemic threats. In 2020, it has committed to disburse US$11.5m and it has actually disbursed US$257,050. Most of the funds went to the World Health Organization. [3] As a recipient, from 2017 through 2020, it has received US$23,708, mostly from Aidsfonds of the Netherlands. [4]

[1] National Institute of Health. 26 July 2018. "Instituto Ricardo Jorge apoia Instituto Nacional de Saúde de Moçambique na área da vigilância epidemiológica". [http://www.insa.min-saude.pt/instituto-ricardo-jorge-apoia-instituto-nacional-de-saude-de-mocambique-na-area-da-vigilancia-epidemiologica/]. Accessed 3 October 2020.
[2] National Institute of Health. 13 March 2018. "Instituto Ricardo Jorge na Guiné-Bissau para apoiar capacitação laboratorial e vigilância epidemiológica de doenças infeciosas". [http://www.insa.min-saude.pt/instituto-ricardo-jorge-na-guine-bissau-para-apoiar-capacitacao-laboratorial-e-vigilancia-epidemiologica-de-doencas-infeciosas/]. Accessed 3 October 2020.
[3] Global Health Security Funding Tracking Dashboard. "Portugal: Funder Profile". [https://tracking.ghscosting.org/details/1028/funder]. Accessed 3 October 2020
[4] Global Health Security Funding Tracking Dashboard. "Portugal: Recipient Profile". [https://tracking.ghscosting.org/details/1028/recipient]. Accessed 3 October 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 insufficient evidence that Portugal has a publicly available plan or policy for sharing genetic data, epidemiological data, clinical specimens, and/or isolated specimens (biological materials) with international organizations and/or other countries that goes beyond influenza. Portugal is part of the EU; therefore, it is also a member of the European Centre for Disease Prevention and Control (ECDC). The ECDC has Epidemic Intelligence Information System (EPIS), 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 and facilitate their reporting under Decision 1082/2013/EU and the coordination of response activities". [1] EPIS platforms go beyond influenza and covers: food- and waterborne diseases and zoonoses, sexually transmitted infections, European Legionnaire's disease, vaccine preventable diseases, and antimicrobial resistance and healthcare-associated infections. [1] However, this constitutes routine surveillance data sharing. There are no evidence in the websites of the Ministry of Health, or Ministry of Agriculture, Forests and Rural Development, or National Institute of Health. [2][3] Portugal does not have a Ministry of Research. [4]

[1] 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 3 October 2020.
[2] Ministry of Health. "Ministry of Health (Ministério da Saúde)". [https://www.sns.gov.pt/institucional/ministerio-da-saude/]. Accessed 3 October 2020.
[3] Government of Portugal. "Agriculture, Forests and Rural Development (Agricultura, Florestas e Desenvolvimento Rural)". [https://www.portugal.gov.pt/pt/gc21/area-de-governo/agricultura-florestas-e-desenvolvimento-rural]. Accessed 3 October 2020.
[4] Government of Portugal. "Composition of the government (Composição do Governo)". [https://www.portugal.gov.pt/pt/gc21/governo/composicao]. Accessed 3 October 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 Portugal has not shared samples in accordance with the PIP framework in the past two years. There are no mentions of Portugal in the World Health Organization's "Pandemic Influenza Preparedness Framework: Partnership Contribution High Level Implementation Plan I" report for 2014-2017. [1] There is only one mention of Portugal in WHO's

"Review of the Pandemic Influenza Preparedness Framework" report of 2016, and the mention is in regards to the fact that Portugal provided response to the Global Influenza Surveillance and Response System (GISRS) online survey. [2] No evidence that Portugal has failed or refused to share samples in accordance with the PIP framework in the WHO website or any media outlet. [3]

[1] World Health Organization. "Pandemic Influenza Preparedness Framework: Partnership Contribution High Level Implementation Plan I: Final Report 2014-2017". [https://extranet.who.int/sph/sites/default/files/document-library/document/WHO-WHE-IHM-PIP-2018.3-eng.pdf]. Accessed 3 October 2020.
[2] World Health Organization. 2016. "Review of the Pandemic Influenza Preparedness Framework". [http://apps.who.int/gb/ebwha/pdf_files/EB140/B140_16-en.pdf?ua=1]. Accessed 3 October 2020.
[3] World Health Organization, Regional Office for Europe. "Influenza: News". [http://www.euro.who.int/en/health-topics/communicable-diseases/influenza/news/news/news]. Accessed 3 October 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 Portugal has failed or refused to share pandemic pathogen samples during an outbreak in the past two years.[1] No evidence was found that Portugal shared sample in either case. No evidence that Portugal has failed or refused to share samples in the WHO website or any media outlet. [2] For the COVID-19 pandemic, Portugal has created a bank of samples that the international community can access to study the disease. [3]

[1] World Health Organization. "Emergencies preparedness, response: Portugal". [https://www.who.int/csr/don/archive/country/prt/en/]. Accessed 3 October 2020.
[2] World Health Organization, Regional Office for Europe. "Influenza: News". [http://www.euro.who.int/en/health-topics/communicable-diseases/influenza/news/news/news]. Accessed 3 October 2020.
[3] Xinhua. 21 April 2020. "Portugal creates biological bank to study COVID-19 (Portugal cria banco biológico para estudar COVID-19)". [http://portuguese.xinhuanet.com/2020-04/21/c_138994810.htm]. Accessed 3 October 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: 3

2020

Economist Intelligence

6.1.1b

Quality of bureaucracy (Economist Intelligence score; 0-4, where 4=best)

Input number

Current Year Score: 2

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: 61

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: 4

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: 4

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: 1

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: 4

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: 96.14

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: 0.92

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: 0.2

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: 0

According to the ILO, the informal sector in Portugal was about 12.5% of total employment in 2018. The latest data found was for 2018. [1][2]

[1] Mamede, R.P., et al. International Labor Organization. June 2020. "Portugal: A quick analysis of the impact of COVID-19 on the economy and the labor market (Portugal: Uma análise rápida do impacto da COVID-19 na economia e no mercado de trabalho)". [https://www.ilo.org/wcmsp5/groups/public/---europe/---ro-geneva/---ilo-lisbon/documents/publication/wcms_754606.pdf]. Accessed 3 October 2020.
[2] Gonçalves, N. Visão. 28 March 2019. "Gender issues in the informal economy in Portugal (As questões de género na economia informal em Portugal)". [https://visao.sapo.pt/opiniao/ponto-de-vista/silencio-da-fraude/2019-03-28-as-questoes-de-genero-na-economia-informal-em-portugal/#:~:text=O%20trabalho%20informal%20em%20Portugal,%2C7%25%20do%20emprego%20total.]. Accessed 3 October 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: 2

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: 0.34

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: 3

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: 4

2021

Economist Intelligence

6.4 ENVIRONMENTAL RISKS

6.4.1 Urbanization

6.4.1a

Urban population (% of total population)

Input number

Current Year Score: 65.76

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: 0.54

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: 2

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: 81.32

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: 317.6

2019

WHO

6.5.1c

Population ages 65 and above (% of total population)

Input number

Current Year Score: 22.36

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: 20.8

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: 1992.47

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