El Salvador

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

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: 0

There is insufficient public evidence that El Salvador has a national AMR plan for the surveillance, detection, and reporting of priority AMR pathogens. In 2015, the Ministry of Health (MINSAL) published the Technical Guidelines for the Prevention, Surveillance and Containment of Bacterial Resistance to Antimicrobials. The guidelines address technical aspects of AMR surveillance within the public health system but do not provide an overall AMR strategy at the national level. [1] The guidelines also specify the creation of the National Commission against Bacterial Resistance (Section 1.1.1), which includes MINSAL, the Ministry of Agriculture, and other entities from government and the private sector. [1] In 2017, MINSAL released the National Plan to Promote Access to and Rational Use of Medications and other Health Technologies ("Plan Nacional para la Promoción del Acceso y Uso Racional de Medicamentos y otras Tecnologías"). Objective 3.4 of the Plan specifies the formulation of a National Plan on AMR, with a target date of 2019, and the founding of a National Commission on AMR, set for 2018. [2] Government websites do not contain a public copy of a national AMR plan. [3] However, the Global Database for the Tripartite Antimicrobial Resistance Country Self-assessment Survey (TrACSS) for El Salvador for the 2016-17 period (only available) states that the country has a "National AMR action plan developed that addresses human health, animal health and other sectors" (Question 5.1), which appears to contradict MINSAL's own plans in the 2017 National Plan to Promote Access to and Rational Use of Medications and other Health Technologies. [2, 4] From 2016 to 2018 the Food and Agriculture Organization of the United Nations (FAO) supported El Salvador in the development of a national AMR plan for the food and agriculture sectors, but the project results do not state that a plan was created nor has a plan been published on government websites. [5, 6] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, WHO Library of National Action Plans, and National Institute of Health do not contain additional public information regarding a national AMR plan. [3, 6, 7, 8] The national laboratory system does not have a website. [3]

[1] Ministry of Health (Ministerio de Salud). 2015. "Technical Guidelines for the Prevention, Surveillance and Containment of Bacterial Resistance to Antimicrobials". [http://asp.salud.gob.sv/regulacion/pdf/lineamientos/lineamientos_prevencion_resistencia_bacteriana_v1.pdf]. Accessed 10 February 2021.
[2] Ministry of Health (Ministerio de Salud). November 2017. "National Plan to Promote Access to and Rational Use of Medications and other Health Technologies" ("Plan Nacional para la Promoción del Acceso y Uso Racional de Medicamentos y otras Tecnologías"). [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_nacional_uso_racional_medicamentos_y_otras_tecnologias_sanitarias_v1.pdf]. Accessed 10 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[4] World Health Organization. 2019. "Country Self-assessment Survey (TrACSS) for El Salvador for the 2016-17 period". [https://amrcountryprogress.org/]. Accessed 10 February 2021.

[5] Food and Agriculture Organization of the United Nations (FAO). 2018. "Apoyo para el desarrollo de Planes de Acción Nacionales en América Latina y el Caribe". [http://www.fao.org/antimicrobial-resistance/projects/completed/project-4/es/]. Accessed 10 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 10 February 2021.
[7] World Health Organization. 2021. "El Salvador – Strategic Partnership for IHR and Health Security (SPH)". [https://extranet.who.int/sph/country/el-salvador]. Accessed 10 February 2021.
[8] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 10 February 2021.

1.1.1b

Is there a national laboratory/laboratory system which tests for priority AMR pathogens?

All 7 + 1 priority pathogens = 2 , Yes, but not all 7+1 pathogens = 1 , No = 0

Current Year Score: 2

There is public evidence that El Salvador has a national laboratory/laboratory system which tests for all 7 + 1 priority AMR pathogens. The Global Database for the Tripartite Antimicrobial Resistance Country Self-assessment Survey (TrACSS) for El Salvador for the 2016-17 period (only available) states that the country has "National AMR surveillance activities [that] are in place for common bacterial pathogens that link patient information with susceptibility testing, with a national reference laboratory that participates in external quality assurance". [1] A 2016 presentation from the Ministry of Health (MINSAL) stated that the national laboratory system could test for AMR related to E. coli, Staphylococcus aureus, Salmonella spp., and Shigella spp. [2] The National Institute of Health's (INS) 2014 annual report notes that the national reference laboratory can test for AMR in N. gonorrhoeae, while the 2017 annual report notes the same for Mycobacterium tuberculosis. [3, 4] A 2018 study published by the INS demonstrated that it carries out AMR testing for K. pneumoniae. [5] In 2018, the INS presented results regarding its AMR testing for S. pneumoniae at the 5th National Congress for Health Research. [6]

[1] World Health Organization. 2017. "Country Self-assessment Survey (TrACSS) for El Salvador for the 2016-17 period". [https://amrcountryprogress.org/]. Accessed 10 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2016. "Bacterial resistance in El Salvador Situation Analysis". [https://www.salud.gob.sv/archivos/pdf/telesalud_2016_presentaciones/presentacion17032016/RB-MAR-2016.pdf]. Accessed 10 February 2021.
[3] National Institute of Health (Instituto Nacional de Salud). 2014. "2014 Annual Report". [http://ins.salud.gob.sv/wp-content/uploads/2018/06/INFORME-LABORES-INS-2014.pdf]. Accessed 10 February 2021.
[4] National Institute of Health (Instituto Nacional de Salud). 2017. "2017 Annual Report". [http://ins.salud.gob.sv/wp-content/uploads/2018/02/MEMLABORES_INSminsal.pdf]. Accessed 10 February 2021.
[5] Villatoro, Esmeralda, et al. 2018. "Identificación de bacterias resistentes a antibióticos carbapenémicos en hospitales de El Salvador". [https://alerta.salud.gob.sv/wp-content/uploads/2019/05/Revista-ALERTA-Vol.1-No.2-An%CC%83o-2018-Esmeralda-Villatoro.pdf]. Accessed 10 February 2021.
[6] National Institute of Health (Instituto Nacional de Salud). 2018. "La investigación científica fue la protagonista del V Congreso Nacional de Investigaciones en Salud". [http://ins.salud.gob.sv/la-investigacion-cientifica-fue-la-protagonista-del-v-congreso-nacional-de-investigaciones-en-salud/]. Accessed 10 February 2021.

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 public evidence that El Salvador conducts environmental detection or surveillance activities (e.g., in soil, waterways) for antimicrobial residues or AMR organisms. In 2015, the Ministry of Health (MINSAL) published the Technical Guidelines for the Prevention, Surveillance and Containment of Bacterial Resistance to Antimicrobials. The guidelines mention environmental surveillance of AMR organisms, but only refer to "environmental samples" from inside hospitals where AMR infections have occurred (Section 8). [1] El Salvador has not issued a national AMR plan, and the WHO Library of National Action Plans does not contain a plan for the country. [2, 3] The websites of the Ministry of Health and Ministry of the Environment and Natural Resources do not contain additional public information regarding environmental detection or surveillance activities for antimicrobial residues or AMR organisms. [2, 4]

[1] Ministry of Health (Ministerio de Salud). 2015. "Technical Guidelines for the Prevention, Surveillance and Containment of Bacterial Resistance to Antimicrobials".
[http://asp.salud.gob.sv/regulacion/pdf/lineamientos/lineamientos_prevencion_resistencia_bacteriana_v1.pdf]. Accessed 10 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[3] World Health Organization. 2021. "El Salvador – Strategic Partnership for IHR and Health Security (SPH)".
[https://extranet.who.int/sph/country/el-salvador]. Accessed 10 February 2021.
[4] Ministry of the Environment and Natural Resources (Ministerio de Medio Ambiente y Recursos Naturales). 2021. "MARN".
[https://marn.gob.sv/]. Accessed 10 February 2021.

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: 0

There is insufficient public evidence that El Salvador has national legislation or regulation in place requiring prescriptions for antibiotic use for humans. In 2015, the National Directorate of Medicines (DNM) announced that it would begin requiring medical prescriptions for pharmacies to sell injectable antibiotics. [1] At the time, the director of the DNM also stated that it would begin requiring prescriptions for oral antibiotics "within three months". However, there is no public evidence that oral antibiotics were later included in the requirement for a prescription. [2] In 2017, the Ministry of Health (MINSAL) released the National Plan to Promote Access to and Rational Use of Medications and other Health Technologies ("Plan Nacional para la Promoción del Acceso y Uso Racional de Medicamentos y otras Tecnologías"). Objective 3.4 of the Plan includes Action 42 "to implement regulation for the sales and dispensing of antimicrobials with a doctor's prescription", with a goal for implementation of 2018, indicating that the 2015 measure was not definitive. [3] There is no public evidence that the 2018 goal was met. [4] The Global Database for the Tripartite Antimicrobial Resistance Country Self-assessment Survey (TrACSS) for El Salvador for the 2016-17 period (only available) states that the country has "No/weak national policy & regulations for antimicrobial stewardship" (Question 9.1) and "No national plan or system for monitoring use of antimicrobials" (Question 7.1). [5] The DNM's most recent Official List of Over-the-Counter Medicines does not contain antibiotics, but at the same time, antibiotics are not included on the DNM's most recent Official List of Controlled Medicines and Substances. [6, 7] The websites of the Ministry of Health, Legislative Assembly, and DNM do not contain additional public information regarding national legislation or regulation in place requiring prescriptions for antibiotic use for humans. [4, 8, 9] The World Health

Organization (WHO) Library of National Action Plans does not list a national AMR plan for El Salvador. [10]

[1] National Directorate of Medicines (Dirección Nacional de Medicamentos). 2015. "Desde hoy únicamente se podrán comprar antibióticos bajo prescripción médica". [https://www.transparenciaactiva.gob.sv/desde-hoy-unicamente-se-podran-comprar-antibioticos-bajo-prescripcion-medica]. Accessed 10 February 2021.
[2] El Diario de Hoy. 2015. "Farmacias llevarán registro de la venta de antibióticos inyectables". [https://historico.elsalvador.com/historico/153143/farmacias-llevaran-registro-de-la-venta-de-antibioticos-inyectables.html]. Accessed 10 February 2021.
[3] Ministry of Health (Ministerio de Salud). November 2017. "National Plan to Promote Access to and Rational Use of Medications and other Health Technologies" ("Plan Nacional para la Promoción del Acceso y Uso Racional de Medicamentos y otras Tecnologías"). [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_nacional_uso_racional_medicamentos_y_otras_tecnologias_sanitarias_v1.pdf]. Accessed 10 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[5] World Health Organization. 2017. "Country Self-assessment Survey (TrACSS) for El Salvador for the 2016-17 period". [https://amrcountryprogress.org/]. Accessed 10 February 2021.
[6] National Directorate of Medicines (Dirección Nacional de Medicamentos). 2021. "Listado Oficial de Medicamentos de Venta Libre". [https://www.medicamentos.gob.sv/index.php/es/servicios-m/listados/listados-farmaceuticos/lomvl]. Accessed 10 February 2021.
[7] National Directorate of Medicines (Dirección Nacional de Medicamentos). 2020. "Listado Oficial de Medicamentos y Sustancias Controladas de la DNM 2020". [https://www.medicamentos.gob.sv/index.php/es/servicios-m/listados/listados-farmaceuticos/lomsc]. Accessed 10 February 2021.
[8] Legislative Assembly (Asamblea Legislativa). 2021. "Búsqueda de Leyes y Decretos". [https://www.asamblea.gob.sv/decretos/busqueda-decretos]. Accessed 10 February 2021.
[9] National Directorate of Medicines (Dirección Nacional de Medicamentos). 2021. "DNM". [https://www.medicamentos.gob.sv/index.php/es/]. Accessed 10 February 2021.
[10] World Health Organization. 2021. "El Salvador - Strategic Partnership for IHR and Health Security (SPH)". [https://extranet.who.int/sph/country/el-salvador]. Accessed 10 February 2021.

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: 0

There is insufficient public evidence that El Salvador has national legislation or regulation in place requiring prescriptions for antibiotic use for animals. In 2017, the Ministry of Health (MINSAL) released the National Plan to Promote Access to and Rational Use of Medications and other Health Technologies ("Plan Nacional para la Promoción del Acceso y Uso Racional de Medicamentos y otras Tecnologías"). Objective 3.4 of the Plan includes Action 43 "to eliminate the practice of use of antimicrobials to stimulate growth and development of animals for industry", with a goal for implementation of 2019. [1] There is no public evidence that the 2019 goal was met. [2] The Global Database for the Tripartite Antimicrobial Resistance Country Self-assessment Survey (TrACSS) for El Salvador for the 2016-17 period (only available) states that the country has "No national plan or system for monitoring use of antimicrobials in animal or crop production" (Question 7.2). The response for Question 9.2 notes that there are regulations on "import, marketing authorization, production, distribution and prudent use of high-quality veterinary medicinal products including antimicrobials" but did not score high enough to indicate that prescriptions are required for antibiotic use in animals. [3] El Salvador's 1995 Vegetable and Animal Health Law (Decree No. 524) does not require prescriptions for antibiotic use for animals. Article 14 establishes that the Ministry of Agriculture and

Ranching is responsible for regulating medicines for animal use. [4] The World Health Organization (WHO) Library of National Action Plans does not list a national AMR plan for El Salvador. [5] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, and Legislative Assembly do not contain additional public information regarding national legislation or regulation in place requiring prescriptions for antibiotic use for animals. [2, 6, 7]

[1] Ministry of Health (Ministerio de Salud). November 2017. "National Plan to Promote Access to and Rational Use of Medications and other Health Technologies" ("Plan Nacional para la Promoción del Acceso y Uso Racional de Medicamentos y otras Tecnologías"). [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_nacional_uso_racional_medicamentos_y_otras_tecnologias_sanitarias_v1.pdf]. Accessed 10 February 2021.
[2] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 10 February 2021.
[3] World Health Organization. 2017. "Country Self-assessment Survey (TrACSS) for El Salvador for the 2016-17 period". [https://amrcountryprogress.org/]. Accessed 10 February 2021.
[4] Legislative Assembly (Asamblea Legislativa). 1995. "Vegetable and Animal Health Law (Decree No. 524)". [https://www.vertic.org/media/National%20Legislation/El_Salvador/SV_Ley_de_Sanidad_Vegetal_y_Animal.pdf]. Accessed 10 February 2021.
[5] World Health Organization. 2021. "El Salvador – Strategic Partnership for IHR and Health Security (SPH)". [https://extranet.who.int/sph/country/el-salvador]. Accessed 10 February 2021.
[6] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[7] Legislative Assembly (Asamblea Legislativa). 2021. "Búsqueda de Leyes y Decretos". [https://www.asamblea.gob.sv/decretos/busqueda-decretos]. Accessed 10 February 2021.

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

There is public evidence that El Salvador has national legislation, plans, or equivalent strategy documents on zoonotic disease. In 2016, the Ministry of Health (MINSAL) issued technical regulations (Agreement No. 1538 of 2016) for diseases transmitted by vectors and zoonoses, covering dengue, malaria, chagas disease, leishmaniasis, leptospirosis and rabies. The regulations describe surveillance, prevention and control of the aforementioned diseases. [1] The regulations establish a requirement for the national health system's ("Sistema Nacional de Salud") regional and local entities (including regional health directorates, hospitals, the Basic Integrated Health System's community committees and community-level family health organizations) to formulate disaster, emergency and contingency plans, that include prevention, epidemiological and entomological surveillance, clinical management and health promotion, inter-sectoral, inter-institutional and community-level coordination, vector control programs and monitoring and evaluation of these diseases. [1] For example, in 2007, MINSAL issued the Technical Regulations for Prevention and Control of Chagas Disease. [2] Article 130 of El Salvador's Health Code (Decree No. 955 of 1988) tasks MINSAL with "all aspects of control of transmissible diseases and zoonoses". [3] MINSAL has a dedicated Zoonosis Unit whose objective is to "propose and develop plans and projects on zoonosis." According to the Unit's website, it specifically has programs on brucellosis, rabies and leptospirosis. [4] In the agricultural sector, in late 2018 the Ministry of Agriculture and Ranching (MAG) held a national consultation with farm associations for input on the Rules to

Prevent, Control and Eradicate Brucellosis and Bovine Tuberculosis. [5]

[1] Ministry of Health (Ministerio de Salud). 17 October 2016. "Agreement No. 1538 of 2016 on Diseases Transmitted by Vectors and Zoonosis." ("Norma Tecnica para las enfermedades transmitidas por vectores y zoonosis"). [https://www.transparencia.gob.sv/system/documents/documents/000/152/259/original/norma_tecnica_enfermedades_transmitidas_vectores_y_zoonosis.pdf?1500375493]. Accessed 11 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2007. "Technical Regulations for Prevention and Control of Chagas Disease". [https://www.paho.org/es/documentos/nota-tecnica-prevencion-control-enfermedad-chagas-salvador]. Accessed 11 February 2021.
[3] Legislative Assembly (Asamblea Legislativa). 1988. "Health Code (Decree No. 955 of 1988)". [https://www.vertic.org/media/National%20Legislation/El_Salvador/SV_Codigo_de_Salud.pdf]. Accessed 11 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2019. "Zoonosis Unit (Unidad de Zoonosis)". [http://usam.salud.gob.sv/index.php/temas/zoonosis]. Accessed 11 February 2021.
[5] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 17 October 2018. "National consultation is held with farmers to validate rules on preventing, controling and erradicating brucelosis and bovine tuberculosis" ("Se realiza consulta nacional con ganaderos para validar reglamentos orientados a prevenir, controlar y erradicar brucelosis y tuberculosis bovina"). [http://www.mag.gob.sv/mag-realiza-consulta-nacional-con-ganaderos-para-validar-reglamentos-orientados-a-prevenir-controlar-y-erradicar-brucelosis-y-tuberculosis-bovina/]. Accessed 11 February 2021.

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: 1

There is public evidence that El Salvador has 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.

The Ministry of Health's (MINSAL) Rodent Control Program is "a set of defensive technical actions to impede rodents from penetrating, living in or proliferating in homes, shops or establishments" in order to prevent rodent-to-human transmission of the zoonotic disease leptospirosis. [1] In terms of risk identification, the national Program works with local health districts to identify rodent populations in order to target actions to control the population. In terms of risk reduction, the Program works to reduce rodent populations in urban and rural areas, to train local health workers, and educate the population on disease transmission and prevention methods. [1] In addition, MINSAL's 2007 Technical Regulations for Prevention and Control of Chagas Disease also include measures for risk identification and reduction for zoonotic disease spillover events from animals to humans. [2]

In terms of risk identification, the Regulations require local health districts to carry out baseline entomological surveys to determine the presence of insects that transmit the disease to humans, as well as educate the population on passive surveillance. In terms of risk reduction, local health workers spray homes where the insect vector is discovered, as well as surveying homes for other risk factors to be corrected. [2]

[1] Ministry of Health (Ministerio de Salud). 2019. "Rodent Control Program". [http://usam.salud.gob.sv/index.php/temas/zoonosis/550]. Accessed 11 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2007. "Technical Regulations for Prevention and Control of Chagas Disease". [https://www.paho.org/es/documentos/nota-tecnica-prevencion-control-enfermedad-chagas-salvador]. Accessed 11

February 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

There is public evidence that El Salvador has national legislation, plans, or guidelines that account for the surveillance and control of multiple zoonotic pathogens of public health concern. The Ministry of Health (MINSAL) has issued technical regulations and guidelines that account for the surveillance and control of at least three zoonotic diseases. MINSAL's 2007 Technical Regulations for Prevention and Control of Chagas Disease require surveillance actions, such as baseline entomological surveys to determine the presence of insects that transmit the disease to humans. In terms of control, the regulations require local health workers to spray homes where the insect vector is discovered. [1] MINSAL's 2017 Technical Guidelines for the Prevention and Control of Leptospirosis require surveillance actions, such as compulsory notification of cases to the national public health system and investigation of contacts of positive cases. In terms of control, health workers must control identified outbreaks and reduce risks by eliminating rat populations, cutting down weeds near dwellings and removing accumulated trash. [2] MINSAL's 2017 Technical Guidelines for the Prevention and Control of Rabies require surveillance actions, such as virus surveillance via diagnostic testing of suspected cases in animals and humans, as well as sending the head or corpse of deceased animals for detailed testing at the National Reference Laboratory. In terms of control, public health workers must trace animal and human contacts of suspected and confirmed cases, identify wildlife reservoirs of the disease, vaccinate dogs and cats, and educate the population on prevention. [3]

[1] Ministry of Health (Ministerio de Salud). 2007. "Technical Regulations for Prevention and Control of Chagas Disease". [https://www.paho.org/es/documentos/nota-tecnica-prevencion-control-enfermedad-chagas-salvador]. Accessed 11 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2017. "Technical Guidelines for the Prevention and Control of Leptospirosis". [http://asp.salud.gob.sv/regulacion/pdf/lineamientos/lineamientos_tecnicos_prevencion_y_control_leptospirosis.pdf]. Accessed 11 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2017. "Technical Guidelines for the Prevention and Control of Rabies". [http://asp.salud.gob.sv/regulacion/pdf/lineamientos/lineamientosprevencioncontrolrabiav2.pdf]. Accessed 11 February 2021.

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 public evidence that El Salvador has a department, agency, or similar unit dedicated to zoonotic disease that functions across ministries. The Ministry of Health (MINSAL) has a dedicated Zoonosis Unit whose objective is to "propose and develop plans and projects on zoonosis". According to the Unit's website, it specifically has programs on brucellosis, rabies and leptospirosis, as well as vaccine production and implementation of International Health Regulations. [1] There is no public evidence that MINSAL's Zoonosis Unit functions across ministries. [1] In addition, MINSAL presides over the National Technical Commission for Zoonosis, which includes three members from MINSAL and three from the Ministry of Agriculture and Ranching (MAG). The Commission is a coordination and supervisory body more than an operational unit for

zoonosis control. [2] Decree No. 16 of 2019 issued the Commission's internal regulations. Article 5 tasks the Commission with "proposing technical regulations for prevention, control and eradication of zoonosis", "designing educational campaigns", "coordinating prevention, control, and/or eradication actions" for zoonoses, and others. [2] The Commission does not have its own staff, and staff members from MINSAL and MAG are responsible for carrying out the activities agreed upon by the Commission within their respective agencies. [2] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, and National Institute of Health do not contain additional public information regarding a department, agency, or similar unit dedicated to zoonotic disease that functions across ministries. [3, 4, 5]

[1] Ministry of Health (Ministerio de Salud). 2019. "Zoonosis Unit (Unidad de Zoonosis)". [http://usam.salud.gob.sv/index.php/temas/zoonosis]. Accessed 11 February 2021.
[2] Presidency of the Republic (Presidencia de la Republica). 2019. "Decree No. 16 of 2019". [https://www.transparencia.gob.sv/institutions/capres/documents/296094/download]. Accessed 11 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[4] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[5] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 10 February 2021.

1.2.2 Surveillance systems for zoonotic diseases/pathogens

1.2.2a

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

Yes = 1 , No = 0

Current Year Score: 1

There is public evidence that El Salvador has a national mechanism (either voluntary or mandatory) for owners of livestock to conduct and report on disease surveillance to a central government agency. Article 23 of the Vegetable and Animal Health Law (Decree No. 524 of 1995) requires owners and others with knowledge of animal illnesses to "immediately notify" the Ministry of Agriculture and Ranching (MAG). [1] According to MAG's transparency website, the procedure for notification is for an individual to call a specific extension at MAG's central office to notify the Coordinator of the Epidemiological Surveillance Area. The service is available from 7:30am to 3:30pm from Monday to Friday and individuals can expect a response from MAG within 24 hours. [2]

[1] Legislative Assembly (Asamblea Legislativa). 1995. "Vegetable and Animal Health Law (Decree No. 524)". [https://www.vertic.org/media/National%20Legislation/El_Salvador/SV_Ley_de_Sanidad_Vegetal_y_Animal.pdf]. Accessed 11 February 2021.
[2] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "Attention to clinical cases of animal illnesses of epidemiological importance". [https://www.transparencia.gob.sv/institutions/mag/services/4488]. Accessed 11 February 2021.

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 public evidence that El Salvador has legislation and/or regulations that safeguard the confidentiality of information generated through surveillance activities for animals (for owners). The Ministry of Agriculture and Ranching's (MAG) Charter of Citizen Rights establishes citizens' right to confidentiality in their dealings with the institution but does not refer specifically to the confidentiality of information generated through surveillance activities for animals, stating that it covers "any communication". [1] Specifically, paragraph 15 of the Charter states that citizens have the right to "maximum privacy, security and confidentiality of their personal information before, during and after the service provided as well as in any communication that they establish with the institution". [1] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, and National Institute of Health do not contain additional public information regarding legislation and/or regulations that safeguard the confidentiality of information generated through surveillance activities for animals (for owners). [2, 3, 4]

[1] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). "Charter of Citizen Rights". [http://www.mag.gob.sv/carta-de-derechos/]. Accessed 11 February 2021.
[2] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 10 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[4] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 2021.

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 public evidence that El Salvador conducts surveillance of zoonotic disease in wildlife (e.g., wild animals, insects, other disease vectors). The Ministry of Health's (MINSAL) Agreement No. 1538 of 2016 issued Technical Regulations for Diseases Transmitted by Vectors and Zoonosis. [1] Article 5 states that entomological surveillance forms part of disease-specific plans. Title III, Chapter II describes entomological surveillance practices, and Article 40 requires that local health districts carry out weekly entomological surveys for prevention and control of zoonoses. [1] In terms of disease-specific regulations, MINSAL's 2007 Technical Regulations for Prevention and Control of Chagas Disease require wildlife surveillance actions, such as baseline entomological surveys to determine the presence of insects that transmit the disease to humans. [2] In terms of implementation, epidemiological bulletins from 2015 and 2017 document the results of entomological surveillance carried out, including the number of homes inspected and the proportion where insect larva were discovered. [3, 4]

[1] Ministry of Health (Ministerio de Salud). 17 October 2016. "Agreement No. 1538 of 2016 on Diseases Transmitted by Vectors and Zoonosis." ("Norma Tecnica para las enfermedades transmitidas por vectores y zoonosis"). [https://www.transparencia.gob.sv/system/documents/documents/000/152/259/original/norma_tecnica_enfermedades_transmitidas_vectores_y_zoonosis.pdf?1500375493]. Accessed 11 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2007. "Technical Regulations for Prevention and Control of Chagas Disease". [https://www.paho.org/es/documentos/nota-tecnica-prevencion-control-enfermedad-chagas-salvador]. Accessed 11 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2015. "Boletín semanalpresentado por la Unidad de Vigilancia de Enfermedades Vectorizadas". [http://usam.salud.gob.sv/index.php/servicios/descargas/documentos/func-download/1668/chk,77911d055ad8b566a017dcdece331d65/no_html,1/]. Accessed 23 February 2021.

[4] Ministry of Health (Ministerio de Salud). 2017. "Boletín Epidemiológico Semana 09 (del 26 de Febrero al 01 de Marzo del 2017)". [https://www.transparencia.gob.sv/institutions/minsal/documents/170367/download]. Accessed 23 February 2021.

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: -

No data available

OIE WAHIS database

1.2.4b

Number of veterinary para-professionals per 100,000 people

Input number

Current Year Score: -

No data available

OIE WAHIS database

1.2.5 Private sector and zoonotic

1.2.5a

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient public evidence that El Salvador's 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. The Ministry of

Health's (MINSAL) Agreement No. 1538 of 2016 issued Technical Regulations for Diseases Transmitted by Vectors and Zoonosis. [1] Article 2 states that the regulations apply to private (as well as public) healthcare providers. Article 19 specifies that private healthcare providers are equally obligated to report cases of zoonoses to authorities. The Regulations do not describe any additional collaboration with the private sector for controlling or responding to zoonoses. [1] MINSAL's Technical Regulations for Prevention and Control of Chagas Disease, Technical Guidelines for the Prevention and Control of Rabies, and Technical Guidelines for the Prevention and Control of Leptospirosis all state that they are compulsory for private (as well as public) healthcare providers, but none provide any specific mechanisms for collaborating with the private sector for controlling or responding to zoonoses. [2, 3, 4] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, and National Institute of Health do not contain additional public information regarding legislation, regulations, or plans that include mechanisms for working with the private sector in controlling or responding to zoonoses. [5, 6, 7] The national laboratory system does not have a website. [5]

[1] Ministry of Health (Ministerio de Salud). 17 October 2016. "Agreement No. 1538 of 2016 on Diseases Transmitted by Vectors and Zoonosis." ("Norma Tecnica para las enfermedades transmitidas por vectores y zoonosis"). [https://www.transparencia.gob.sv/system/documents/documents/000/152/259/original/norma_tecnica_enfermedades_transmitidas_vectores_y_zoonosis.pdf?1500375493]. Accessed 11 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2007. "Technical Regulations for Prevention and Control of Chagas Disease". [https://www.paho.org/es/documentos/nota-tecnica-prevencion-control-enfermedad-chagas-salvador]. Accessed 11 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2017. "Technical Guidelines for the Prevention and Control of Rabies". [http://asp.salud.gob.sv/regulacion/pdf/lineamientos/lineamientosprevencioncontrolrabiav2.pdf]. Accessed 11 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2017. "Technical Guidelines for the Prevention and Control of Leptospirosis". [http://asp.salud.gob.sv/regulacion/pdf/lineamientos/lineamientos_tecnicos_prevencion_y_control_leptospirosis.pdf]. Accessed 11 February 2021.
[5] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[7] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 10 February 2021.

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 no public evidence that El Salvador has 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. In 2018, El Salvador's National Reference Laboratory underwent an upgrade to be able to receive level 2+ biosafety samples, but no additional public information is available on inventories or inventory

management systems in the facility. [1, 2] The Ministry of Health's (MINSAL) 2008 Biosafety Guide for Clinical Laboratories, section 10.4, states that laboratories should maintain "an updated inventory and the location of dangerous chemical products or biological agents capable of causing serious illnesses or death to humans or animals". [3] There is no public evidence that details regarding such inventories or inventory systems have been shared publicly. [2, 4] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, Ministry of National Defense, National Council of Science and Technology, Verification Research, Training and Information Centre (VERTIC), and National Institute of Health do not contain additional public information regarding a record, updated within the past five years, of the facilities in which especially dangerous pathogens and toxins are stored or processed. [2, 4, 5, 6, 7, 8] Although El Salvador submitted Confidence Building Measures reports in 2020, 2019 and 2018, access to the reports is restricted (not available to the public), so it is not known what information they contain regarding this matter. [9] The national laboratory system does not have a website. [4]

[1] Ministry of Health. 22 May 2018. "National Reference Lab: an entity that reinvents itself" ("Laboratorio Nacional de Referencia: una entidad que se reinventa"). [http://ins.salud.gob.sv/laboratorio-nacional-de-referencia-una-entidad-que-se-reinventa/]. Accessed 11 February 2021.
[2] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 10 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2008. "Biosafety Guide for Clinical Laboratories". [http://asp.salud.gob.sv/regulacion/pdf/guia/Guia_bioseguridad_laboratorios_clinicos.pdf]. Accessed 11 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[5] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. "Fuerza Armada de El Salvador". [https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[7] National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología de El Salvador). 2021. "CONACYT". [https://www.conacyt.gob.sv/]. Accessed 11 February 2021.
[8] Verification Research, Training and Information Centre (VERTIC). 2021. "El Salvador". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/e/]. Accessed 11 February 2021.
[9] United Nations Office at Geneva. 2020. "BWC Electronic Confidence Building Measures Portal". [https://bwc-ecbm.unog.ch/state/el-salvador]. Accessed 11 February 2021.

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 insufficient evidence that El Salvador has 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 all facilities in which especially dangerous pathogens and toxins are stored or processed. There is some evidence that biosecurity guidelines exist, but there is no public evidence that they apply to all relevant facilities in the country. The Ministry of Health's (MINSAL) 2008 Biosafety Guide for Clinical Laboratories, section 10, establishes some biosecurity ("bioproteccion") requirements, such as controlled access to areas where biological agents or toxins are stored, knowledge of who is in the laboratory, and knowledge of materials that enter and leave the laboratory. [1] The Guide does not state if it is mandatory or if it applies to all laboratories or relevant facilities. It is not accompanied by a resolution or other official

document indicating its legal status. [1] Similarly, in 2012 MINSAL issued Technical Guidelines for Biosafety, but these only apply to health workers, not facilities and do not include biosecurity requirements. [2] In terms of application of regulations to the private sector, MINSAL Executive Decree No. 81 of 1995 states that all laboratories (public and private) must be accredited by the National Council of Science and Technology (CONACYT), but the regulations do not include any reference to biosecurity requirements. [3] El Salvador's 2019 International Health Regulations (IHR) State Party self-assessment annual report scored the country at 100% for indicator "C.5.2 Implementation of a laboratory biosafety and biosecurity regime". [4] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, Ministry of National Defense, National Council of Science and Technology, Verification Research, Training and Information Centre (VERTIC), and National Institute of Health do not contain additional public information regarding legislation and/or regulations related to biosecurity. [5, 6, 7, 8, 9, 10] Although El Salvador submitted Confidence Building Measures reports in 2020, 2019 and 2018, access to the reports is restricted (not available to the public), so it is not known what information they contain regarding this matter. [11] The national laboratory system does not have a website. [10]

[1] Ministry of Health (Ministerio de Salud). 2008. "Biosafety Guide for Clinical Laboratories". [http://asp.salud.gob.sv/regulacion/pdf/guia/Guia_bioseguridad_laboratorios_clinicos.pdf]. Accessed 11 February 2021.
[2] Ministry of Health (Ministerio de Salud). January 2012. "Technical Biosafety Guidelines" ("Lineamientos Tecnicos sobre Bioseguridad"). [https://www.transparencia.gob.sv/system/documents/documents/000/013/305/original/lineamiento_Bioseguridad.pdf?1500360527]. Accessed 11 February 2021.
[3] Ministry of Health (Ministerio de Salud). 1995. "Regulation for Accreditation of Clinical and Analysis Laboratories (Executive Decree No. 81 of 1995)". [https://www.vertic.org/media/National%20Legislation/El_Salvador/SV_Reglamento_de_Acreditacion_de_Laboratorios.pdf]. Accessed 11 February 2021.
[4] World Health Organization. 2019. "IHR Score per capacity - El Salvador". [https://extranet.who.int/e-spar/]. Accessed 11 February 2021.
[5] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. "Fuerza Armada de El Salvador". [https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[7] National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología de El Salvador). 2021. "CONACYT". [https://www.conacyt.gob.sv/]. Accessed 11 February 2021.
[8] Verification Research, Training and Information Centre (VERTIC). 2021. "El Salvador". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/e/]. Accessed 11 February 2021.
[9] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 10 February 2021.
[10] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[11] United Nations Office at Geneva. 2020. "BWC Electronic Confidence Building Measures Portal". [https://bwc-ecbm.unog.ch/state/el-salvador]. Accessed 11 February 2021.

1.3.1c

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

Current Year Score: 0

There is no public evidence that El Salvador has an established agency (or agencies) responsible for the enforcement of biosecurity legislation and regulations. There is no public evidence that the country has legislation and/or regulations related to biosecurity that apply to all relevant facilities in the country. The Ministry of Health's (MINSAL) 2008 Biosafety Guide for Clinical Laboratories, section 10, establishes some biosecurity ("bioproteccion") requirements, such as controlled access to areas where biological agents or toxins are stored, knowledge of who is in the laboratory, and knowledge of materials that enter and leave the laboratory. [1] The Guide does not state if it is mandatory or if it applies to all laboratories or relevant facilities. It is not accompanied by a resolution or other official document indicating its legal status. [1] El Salvador's 2019 International Health Regulations (IHR) State Party self-assessment annual report scored the country at 100% for indicator "C.5.2 Implementation of a laboratory biosafety and biosecurity regime". [2] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, Ministry of National Defense, National Council of Science and Technology, Verification Research, Training and Information Centre (VERTIC), and National Institute of Health do not contain additional public information regarding an established agency (or agencies) responsible for the enforcement of biosecurity legislation and regulations. [3, 4, 5, 6, 7, 8] Although El Salvador submitted Confidence Building Measures reports in 2020, 2019 and 2018, access to the reports is restricted (not available to the public), so it is not known what information they contain regarding this matter. [9] The national laboratory system does not have a website. [4]

[1] Ministry of Health (Ministerio de Salud). 2008. "Biosafety Guide for Clinical Laboratories". [http://asp.salud.gob.sv/regulacion/pdf/guia/Guia_bioseguridad_laboratorios_clinicos.pdf]. Accessed 11 February 2021.
[2] World Health Organization. 2019. "IHR Score per capacity - El Salvador". [https://extranet.who.int/e-spar/]. Accessed 11 February 2021.
[3] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 10 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[5] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. "Fuerza Armada de El Salvador". [https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[7] National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología de El Salvador). 2021. "CONACYT". [https://www.conacyt.gob.sv/]. Accessed 11 February 2021.
[8] Verification Research, Training and Information Centre (VERTIC). 2021. "El Salvador". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/e/]. Accessed 11 February 2021.
[9] United Nations Office at Geneva. 2020. "BWC Electronic Confidence Building Measures Portal". [https://bwc-ecbm.unog.ch/state/el-salvador]. Accessed 11 February 2021.

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 no public evidence that El Salvador has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities. The Ministry of Health's (MINSAL) 2008 Biosafety Guide for Clinical Laboratories, section 10.4, states that laboratories should maintain "an updated inventory and the location of dangerous chemical products or biological agents capable of causing serious illnesses or death to humans or animals". [1] There is no public evidence that the country has consolidated inventories of such substances. [2, 3] The websites of the Ministry of

Health, Ministry of Agriculture and Ranching, Ministry of National Defense, National Council of Science and Technology, Verification Research, Training and Information Centre (VERTIC), and National Institute of Health do not contain additional public information regarding action to consolidate inventories of especially dangerous pathogens and toxins into a minimum number of facilities. [4, 5, 6, 7] Although El Salvador submitted Confidence Building Measures reports in 2020, 2019 and 2018, access to the reports is restricted (not available to the public), so it is not known what information they contain regarding this matter. [8] The national laboratory system does not have a website. [2]

[1] Ministry of Health (Ministerio de Salud). 2008. "Biosafety Guide for Clinical Laboratories". [http://asp.salud.gob.sv/regulacion/pdf/guia/Guia_bioseguridad_laboratorios_clinicos.pdf]. Accessed 11 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[3] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 10 February 2021.
[4] Verification Research, Training and Information Centre (VERTIC). 2021. "El Salvador". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/e/]. Accessed 11 February 2021.
[5] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. "Fuerza Armada de El Salvador". [https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[7] National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología de El Salvador). 2021. "CONACYT". [https://www.conacyt.gob.sv/]. Accessed 11 February 2021.
[8] United Nations Office at Geneva. 2020. "BWC Electronic Confidence Building Measures Portal". [https://bwc-ecbm.unog.ch/state/el-salvador]. Accessed 11 February 2021.

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: 0

There is no public evidence that El Salvador has in-country capacity to conduct Polymerase Chain Reaction (PCR)-based diagnostic testing for anthrax and/or Ebola, which would preclude culturing a live pathogen. In terms of Ebola, the Ministry of Health (MINSAL) last updated its Technical Guidelines for Prevention and Control of Ebola in 2019. Section G of the Guidelines states that samples will be sent to an international reference laboratory for testing because the National Reference Laboratory does not possess sufficient biosafety rating to carry out testing in-country. [1] In terms of anthrax, two MINSAL public health manuals that refer to anthrax testing do not mention the ability to perform in-country PCR testing for the infection. [2, 3] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, Ministry of National Defense, National Council of Science and Technology, Verification Research, Training and Information Centre (VERTIC), and National Institute of Health do not contain additional public information regarding has in-country capacity to conduct Polymerase Chain Reaction (PCR)-based diagnostic testing for anthrax and/or Ebola. [4, 5, 6, 7, 8, 9] The national laboratory system does not have a website. [8] Although El Salvador submitted Confidence Building Measures reports in 2020, 2019 and 2018, access to the reports is restricted (not available to the public), so it is not known what information they contain regarding this matter. [10]

[1] Ministry of Health (Ministerio de Salud). 2019. "Technical Guidelines for Prevention and Control of Ebola". [http://asp.salud.gob.sv/regulacion/pdf/lineamientos/lineamientosprevencionycontrolebola2019v1.pdf]. Accessed 11

February 2021.
[2] Ministry of Health (Ministerio de Salud). 2013. "Manual for Taking, Handling, and Sending Laboratory Specimens". [http://asp.salud.gob.sv/regulacion/pdf/manual/manual_toma_manejo_y_envio_muestras_laboratorio.pdf]. Accessed 11 February 2021.
[3] Ministry of Health (Ministerio de Salud). August 2019. "Technical Guidelines for the National Epidemiological System in El Salvador VIGEPES". [http://asp.salud.gob.sv/regulacion/pdf/lineamientos/lineamientostecnicossistemanacionaldevigilanciaepidemiologicavigepesv1.pdf]. Accessed 11 February 2021.
[4] Verification Research, Training and Information Centre (VERTIC). 2021. "El Salvador". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/e/]. Accessed 11 February 2021.
[5] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. "Fuerza Armada de El Salvador". [https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[7] National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología de El Salvador). 2021. "CONACYT". [https://www.conacyt.gob.sv/]. Accessed 11 February 2021.
[8] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[9] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 10 February 2021.
[10] United Nations Office at Geneva. 2020. "BWC Electronic Confidence Building Measures Portal". [https://bwc-ecbm.unog.ch/state/el-salvador]. Accessed 11 February 2021.

1.3.2 Biosecurity training and practices

1.3.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that El Salvador requires biosecurity training, using a standardized, 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. There is no public evidence that the country has legislation and/or regulations related to biosecurity that apply to all relevant facilities in the country. The Ministry of Health's (MINSAL) 2008 Biosafety Guide for Clinical Laboratories, section 10, establishes some biosecurity ("bioproteccion") requirements but does not describe any requirements for biosecurity training. [1] El Salvador's 2019 International Health Regulations (IHR) State Party self-assessment annual report scored the country at 100% for indicator "C.5.2 Implementation of a laboratory biosafety and biosecurity regime". [2] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, Ministry of National Defense, National Council of Science and Technology, Verification Research, Training and Information Centre (VERTIC), and National Institute of Health do not contain additional public information regarding biosecurity training. [3, 4, 5, 6, 7, 8] The national laboratory system does not have a website. [8] Although El Salvador submitted Confidence Building Measures reports in 2020, 2019 and 2018, access to the reports is restricted (not available to the public), so it is not known what information they contain regarding this matter. [9]

[1] Ministry of Health (Ministerio de Salud). 2008. “Biosafety Guide for Clinical Laboratories”. [http://asp.salud.gob.sv/regulacion/pdf/guia/Guia_bioseguridad_laboratorios_clinicos.pdf]. Accessed 11 February 2021.
[2] World Health Organization. 2019. “IHR Score per capacity - El Salvador”. [https://extranet.who.int/e-spar/]. Accessed 11 February 2021.
[3] National Institute of Health (Instituto Nacional de Salud). 2021. “INS”. [http://ins.salud.gob.sv/]. Accessed 10 February 2021.
[4] Verification Research, Training and Information Centre (VERTIC). 2021. “El Salvador”. [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/e/]. Accessed 11 February 2021.
[5] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. “Fuerza Armada de El Salvador”. [https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. “MAG”. [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[7] National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología de El Salvador). 2021. “CONACYT”. [https://www.conacyt.gob.sv/]. Accessed 11 February 2021.
[8] Ministry of Health (Ministerio de Salud). 2021. “MINSAL”. [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[9] United Nations Office at Geneva. 2020. "BWC Electronic Confidence Building Measures Portal". [https://bwc-ecbm.unog.ch/state/el-salvador]. Accessed 11 February 2021.

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 no public evidence that El Salvador’s 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. The Ministry of Health’s (MINSAL) 2008 Biosafety Guide for Clinical Laboratories and 2012 Technical Guidelines for Biosafety do not mention personnel vetting. [1, 2] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, Ministry of National Defense, National Council of Science and Technology, Verification Research, Training and Information Centre (VERTIC), and National Institute of Health do not contain additional public information regarding biosecurity-related personnel vetting. [3, 4, 5, 6, 7, 8] The national laboratory system does not have a website. [8] Although El Salvador submitted Confidence Building Measures reports in 2020, 2019 and 2018, access to the reports is restricted (not available to the public), so it is not known what information they contain regarding this matter. [9]

[1] Ministry of Health (Ministerio de Salud). 2008. “Biosafety Guide for Clinical Laboratories”. [http://asp.salud.gob.sv/regulacion/pdf/guia/Guia_bioseguridad_laboratorios_clinicos.pdf]. Accessed 11 February 2021.
[2] Ministry of Health (Ministerio de Salud). January 2012. "Technical Guidelines for Biosafety" ("Lineamientos Tecnicos sobre Bioseguridad"). [https://www.transparencia.gob.sv/system/documents/documents/000/013/305/original/lineamiento_Bioseguridad.pdf?1500360527]. Accessed 11 February 2021.

[3] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 10 February 2021.
[4] Verification Research, Training and Information Centre (VERTIC). 2021. "El Salvador". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/e/]. Accessed 11 February 2021.
[5] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. "Fuerza Armada de El Salvador". [https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[7] National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología de El Salvador). 2021. "CONACYT". [https://www.conacyt.gob.sv/]. Accessed 11 February 2021.
[8] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[9] United Nations Office at Geneva. 2020. "BWC Electronic Confidence Building Measures Portal". [https://bwc-ecbm.unog.ch/state/el-salvador]. Accessed 11 February 2021.

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: 0

There is insufficient public evidence that El Salvador has national regulations on the safe and secure transport of infectious substances (specifically including Categories A and B). Recent regulations regarding the transportation of COVID-19 specimens mention United Nations Biological Substance Category B, but the framework regulations for transport of infectious substances do not mention Category A of B. The Ministry of Health's (MINSAL) 2020 Technical Guidelines for Performing Diagnostic Testing for COVID-19 in Clinical Laboratories of the Integrated National Health System state that specimens should be transported "following the United Nations Model Regulations, 2019-2020 WHO Guide on Regulations regarding the transport of infectious substances, classifying it as Biological Substance Category B". [1] However, framework regulations for transport of infectious substances do not mention Category A of B. The Ministry of Environment's 2000 Special Regulations regarding Dangerous Substances, Residues and Waste do not mention Category A or B, instead classifying infectious substances under Class 6, divisions 6.1, 6.2, and 6.3. [2] MINSAL's 2008 Biosafety Guide for Clinical Laboratories uses the same classification system, placing infectious substances in division 6.2. [3] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, Ministry of National Defense, National Council of Science and Technology, Verification Research, Training and Information Centre (VERTIC), and National Institute of Health do not contain additional public information regarding national regulations on the safe and secure transport of infectious substances (specifically including Categories A and B). [4, 5, 6, 7, 8, 9] The national laboratory system does not have a website. [8] Although El Salvador submitted Confidence Building Measures reports in 2020, 2019 and 2018, access to the reports is restricted (not available to the public), so it is not known what information they contain regarding this matter. [10]

[1] Ministry of Health (Ministerio de Salud). 2020. "Technical Guidelines for Performing Diagnostic Testing for COVID-19 in Clinical Laboratories of the Integrated National Health System". [http://asp.salud.gob.sv/regulacion/pdf/lineamientos/lineamientostecnicospararealizarpruebasparaeldiagnosticodeCOVID19enloslaboratoriosclinicosdelSNIS-Acuerdo1084.pdf]. Accessed 11 February 2021.
[2] Ministry of the Environment and Natural Resources (Ministerio de Medio Ambiente y Recursos Naturales). 2000. "Special

Regulations regarding Dangerous Substances, Residues and Waste".
[https://www.vertic.org/media/National%20Legislation/El_Salvador/SV_Reglamento_de_Productos_Peligrosos.pdf]. Accessed 11 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2008. "Biosafety Guide for Clinical Laboratories".
[http://asp.salud.gob.sv/regulacion/pdf/guia/Guia_bioseguridad_laboratorios_clinicos.pdf]. Accessed 11 February 2021.
[4] Verification Research, Training and Information Centre (VERTIC). 2021. "El Salvador".
[https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/e/]. Accessed 11 February 2021.
[5] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. "Fuerza Armada de El Salvador".
[https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[7] National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología de El Salvador). 2021. "CONACYT".
[https://www.conacyt.gob.sv/]. Accessed 11 February 2021.
[8] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[9] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 10 February 2021.
[10] United Nations Office at Geneva. 2020. "BWC Electronic Confidence Building Measures Portal". [https://bwc-ecbm.unog.ch/state/el-salvador]. Accessed 11 February 2021.

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: 0

There is insufficient public evidence that El Salvador has 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. Article 109 of the country's Health Code (Decree No. 955 of 1988) specifies that the Ministry of Health (MINSAL) has jurisdiction over "the import, export, storage, transportation, distribution, use and destruction of all substances and waste" that could be dangerous to health, but there is no publicly available evidence that regulations have been issued on the matter, including on end-user screening. [1] Legislative Decree 655 of 1999 (Law for the Control and Regulation of Arms, Munitions, Explosives and Similar Articles), Article 58, prohibits the "fabrication, importation, exportation, trade, possession or carrying of…chemical, biological or radioactive arms or substances used for their creation". [2] Article 34 states that any exportation or importation of such items requires a special permit from the Ministry of National Defense, and the involved parties must provide the names of the sender and receiver, ensuring that the substances are not diverted to "third countries". [2] However, the law does not specifically mention end-user screening. [2] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, Ministry of National Defense, National Council of Science and Technology, Verification Research, Training and Information Centre (VERTIC), and National Institute of Health do not contain additional public information regarding cross-border transfer and end-user screening of especially dangerous pathogens, toxins, and pathogens with pandemic potential. [3, 4, 5, 6, 7, 8] The national laboratory system does not have a website. [8] Although El Salvador submitted Confidence Building Measures reports in 2020, 2019 and 2018, access to the reports is restricted (not available to the public), so it is not known what information they contain regarding this matter. [9]

[1] Legislative Assembly (Asamblea Legislativa). 1988. “Health Code (Decree No. 955 of 1988)”. [https://www.vertic.org/media/National%20Legislation/El_Salvador/SV_Codigo_de_Salud.pdf]. Accessed 11 February 2021.
[2] Legislative Assembly (Asamblea Legislativa). 1999. “Legislative Decree 655 of 1999 (Law for the Control and Regulation of Arms, Munitions, Explosives and Similar Articles)”. [https://www.vertic.org/media/National%20Legislation/El_Salvador/SV_Ley_de_Control_de_Armas_Municiones.pdf]. Accessed 11 February 2021.
[3] National Institute of Health (Instituto Nacional de Salud). 2021. “INS”. [http://ins.salud.gob.sv/]. Accessed 10 February 2021.
[4] Verification Research, Training and Information Centre (VERTIC). 2021. “El Salvador”. [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/e/]. Accessed 11 February 2021.
[5] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. “Fuerza Armada de El Salvador”. [https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. “MAG”. [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[7] National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología de El Salvador). 2021. “CONACYT”. [https://www.conacyt.gob.sv/]. Accessed 11 February 2021.
[8] Ministry of Health (Ministerio de Salud). 2021. “MINSAL”. [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[9] United Nations Office at Geneva. 2020. "BWC Electronic Confidence Building Measures Portal". [https://bwc-ecbm.unog.ch/state/el-salvador]. Accessed 11 February 2021.

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: 0

There is insufficient public evidence that El Salvador has in place national biosafety legislation and/or regulations. It is unclear from public evidence if existing biosafety rules apply to all professionals and facilities in the public and private sectors of the health system. In 2008, the Ministry of Health (MINSAL) published the Guide for Biosafety Procedures in Clinical Laboratories and the Manual for Biosafety Procedures in Clinical Laboratories, but neither of these appears to be mandatory for both the public and private sectors. [1, 2] In 2012, MINSAL issued the Technical Biosafety Guidelines, which apply to all “personnel from facilities in the National Health System”. [3] In 2019, Decree No. 302 created the “National Integrated Health System” (SNIS), which specifically includes public and private facilities and personnel, but this was subsequent to the publication of the 2012 Biosafety Technical Guidelines, and it is not clear if this would make them retroactively applicable to private facilities and personnel. [4] In July 2020, MINSAL issued the Biosafety Protocol for the Provision of Healthcare Services during the COVID-19 Pandemic. The protocol is directed at the SNIS (which includes public and private facilities), but it only contains recommendations and is meant to be “advisory” instead of binding. [5] Separately, El Salvador's 2008 Special Regulations for the Safe Handling of Genetically Modified Organisms (GMO) (Executive Decree No. 78) defines biosafety in terms of GMO and focuses on biodiversity and reducing the risks from the use of GMO crops. [6] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, Ministry of National Defense, National Council of Science and Technology, Verification Research, Training and Information Centre (VERTIC), and National Institute of Health do not contain additional public information regarding biosafety laws or regulations. [7, 8, 9, 10, 11, 12] The national laboratory system does not have a

website. [8] Although El Salvador submitted Confidence Building Measures reports in 2020, 2019 and 2018, access to the reports is restricted (not available to the public), so it is not known what information they contain regarding this matter. [13]

[1] Ministry of Health (Ministerio de Salud). 2008. "Biosafety Guide for Clinical Laboratories". [http://asp.salud.gob.sv/regulacion/pdf/guia/Guia_bioseguridad_laboratorios_clinicos.pdf]. Accessed 13 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2008. "Biosafety Manual for Clinical Laboratories". [https://www.vertic.org/media/National%20Legislation/El_Salvador/SV_Manual_Bioseguridad_Laboratorios_Clinicos.pdf]. Accessed 11 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2012. "Biosafety Technical Guidelines". [https://www.transparencia.gob.sv/system/documents/documents/000/013/305/original/lineamiento_Bioseguridad.pdf?1500360527]. Accessed 13 February 2021.
[4] Legislative Assembly (Asamblea Legislativa). 2019. "Decree No. 302". [http://cssp.gob.sv/wp-content/uploads/2016/05/Ley-del-Sistema-Nacional-Integrado-de-Salud..pdf]. Accessed 13 February 2021.
[5] Superior Council of Public Health (Consejo Superior de Salud Publica). 2020. "Biosafety Protocol for the Provision of Healthcare Services during the COVID-19 Pandemic". [http://cssp.gob.sv/wp-content/uploads/2020/07/PROTOCOLO-DE-BIOSEGURIDAD-PARA-ESTABLECIMIENTOS-DE-SALUD.pdf]. Accessed 13 February 2021.
[6] Presidency of the Republic (Presidencia de la Republica). 2008. "Special Regulations for the Safe Handling of Genetically Modified Organisms (GMO) (Executive Decree No. 78)". [https://www.vertic.org/media/National%20Legislation/El_Salvador/SV_Reglamento_OGMs.pdf]. Accessed 13 February 2021.
[7] National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología de El Salvador). 2021. "CONACYT". [https://www.conacyt.gob.sv/]. Accessed 11 February 2021.
[8] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[9] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 10 February 2021.
[10] Verification Research, Training and Information Centre (VERTIC). 2021. "El Salvador". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/e/]. Accessed 11 February 2021.
[11] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. "Fuerza Armada de El Salvador". [https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[12] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[13] United Nations Office at Geneva. 2020. "BWC Electronic Confidence Building Measures Portal". [https://bwc-ecbm.unog.ch/state/el-salvador]. Accessed 11 February 2021.

1.4.1b

Is there an established agency responsible for the enforcement of biosafety legislation and regulations?

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient public evidence that El Salvador has an established agency responsible for the enforcement of biosafety legislation and regulations that apply to all professionals and facilities in the public and private sectors of the health system. The Ministry of Health (MINSAL) published biosafety rules and recommendations in 2008 and 2012. [1, 2, 3] The 2008 Manual for Biosafety Procedures in Clinical Laboratories tasked the ministry's Laboratory Surveillance Unit in the Directorate of Regulation with updating the rules. [2] The 2008 Guide for Biosafety Procedures in Clinical Laboratories, Section 11, recommended that each healthcare facility create a "biosafety committee to adequately implement the pertinent policies

and facilitate access to information and updates on biosafety measures", but the recommendation was not mandatory. [1] El Salvador's Health Code (Decree No. 955 of 1988) does not assign an agency responsible for the enforcement of biosafety. [4] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, Ministry of National Defense, National Council of Science and Technology, Verification Research, Training and Information Centre (VERTIC), and National Institute of Health do not contain additional public information regarding an established agency responsible for the enforcement of biosafety legislation and regulations. [5, 6, 7, 8, 9, 10] The national laboratory system does not have a website. [8] Although El Salvador submitted Confidence Building Measures reports in 2020, 2019 and 2018, access to the reports is restricted (not available to the public), so it is not known what information they contain regarding this matter. [11]

[1] Ministry of Health (Ministerio de Salud). 2008. "Biosafety Guide for Clinical Laboratories". [http://asp.salud.gob.sv/regulacion/pdf/guia/Guia_bioseguridad_laboratorios_clinicos.pdf]. Accessed 13 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2008. "Biosafety Manual for Clinical Laboratories". [https://www.vertic.org/media/National%20Legislation/El_Salvador/SV_Manual_Bioseguridad_Laboratorios_Clinicos.pdf]. Accessed 11 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2012. "Biosafety Technical Guidelines". [https://www.transparencia.gob.sv/system/documents/documents/000/013/305/original/lineamiento_Bioseguridad.pdf?1500360527]. Accessed 13 February 2021.
[4] Legislative Assembly (Asamblea Legislativa). 1988. "Health Code (Decree No. 955 of 1988)". [https://www.vertic.org/media/National%20Legislation/El_Salvador/SV_Codigo_de_Salud.pdf]. Accessed 11 February 2021.
[5] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. "Fuerza Armada de El Salvador". [https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[7] National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología de El Salvador). 2021. "CONACYT". [https://www.conacyt.gob.sv/]. Accessed 11 February 2021.
[8] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[9] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 10 February 2021.
[10] Verification Research, Training and Information Centre (VERTIC). 2021. "El Salvador". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/e/]. Accessed 11 February 2021.
[11] United Nations Office at Geneva. 2020. "BWC Electronic Confidence Building Measures Portal". [https://bwc-ecbm.unog.ch/state/el-salvador]. Accessed 11 February 2021.

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 no public evidence that El Salvador requires biosafety training, using a standardized, 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. While the importance of training is

mentioned in the "Introduction" of the 2008 Manual for Biosafety Procedures in Clinical Laboratories, there is no information on whether this training is standardized. [1] The 2008 Guide for Biosafety Procedures in Clinical Laboratories tasks the biosafety committee that each healthcare facility is recommended to create with “carrying out training and continuing education programs”. The Guide also states that the “head of laboratory” is responsible for “continually training personnel under his/her charge, on biosafety”. [2] Training is not mentioned in El Salvador's 2012 Biosafety Technical Guidelines. [3] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, Ministry of National Defense, National Council of Science and Technology, Verification Research, Training and Information Centre (VERTIC), and National Institute of Health do not contain additional public information regarding biosafety training. [4, 5, 6, 7, 8, 9] The national laboratory system does not have a website. [8] Although El Salvador submitted Confidence Building Measures reports in 2020, 2019 and 2018, access to the reports is restricted (not available to the public), so it is not known what information they contain regarding this matter. [10]

[1] Ministry of Health (Ministerio de Salud). 2008. “Biosafety Manual for Clinical Laboratories”. [https://www.vertic.org/media/National%20Legislation/El_Salvador/SV_Manual_Bioseguridad_Laboratorios_Clinicos.pdf]. Accessed 11 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2008. “Biosafety Guide for Clinical Laboratories”. [http://asp.salud.gob.sv/regulacion/pdf/guia/Guia_bioseguridad_laboratorios_clinicos.pdf]. Accessed 13 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2012. “Biosafety Technical Guidelines”. [https://www.transparencia.gob.sv/system/documents/documents/000/013/305/original/lineamiento_Bioseguridad.pdf?1500360527]. Accessed 13 February 2021.
[4] Verification Research, Training and Information Centre (VERTIC). 2021. “El Salvador”. [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/e/]. Accessed 11 February 2021.
[5] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. “Fuerza Armada de El Salvador”. [https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. “MAG”. [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[7] National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología de El Salvador). 2021. “CONACYT”. [https://www.conacyt.gob.sv/]. Accessed 11 February 2021.
[8] Ministry of Health (Ministerio de Salud). 2021. “MINSAL”. [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[9] National Institute of Health (Instituto Nacional de Salud). 2021. “INS”. [http://ins.salud.gob.sv/]. Accessed 10 February 2021.
[10] United Nations Office at Geneva. 2020. "BWC Electronic Confidence Building Measures Portal". [https://bwc-ecbm.unog.ch/state/el-salvador]. Accessed 11 February 2021.

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

There is no public evidence that El Salvador 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. The websites of the Ministry of Health, Ministry of Agriculture and Ranching, Ministry of National Defense, National Council of Science and Technology, Verification Research, Training and Information Centre (VERTIC), and National Institute of Health do not contain additional public information regarding an assessment to determine whether ongoing research is occurring on especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research. [1, 2, 3, 4, 5, 6] The national laboratory system does not have a website. [2] Although El Salvador submitted Confidence Building Measures reports in 2020, 2019 and 2018, access to the reports is restricted (not available to the public), so it is not known what information they contain regarding this matter. [7]

[1] National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología de El Salvador). 2021. "CONACYT". [https://www.conacyt.gob.sv/]. Accessed 11 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[3] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 10 February 2021.
[4] Verification Research, Training and Information Centre (VERTIC). 2021. "El Salvador". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/e/]. Accessed 11 February 2021.
[5] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. "Fuerza Armada de El Salvador". [https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[7] United Nations Office at Geneva. 2020. "BWC Electronic Confidence Building Measures Portal". [https://bwc-ecbm.unog.ch/state/el-salvador]. Accessed 11 February 2021.

1.5.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that El Salvador has legislation and/or regulation requiring oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research. In 2014, El Salvador joined several other countries to submit a "Code of Conduct for Scientists" to the Biological Weapons Convention Meeting of States Parties. The Code does not directly mention dual-use research, but Article 2, paragraph 3 states, "Scientists and authorized staffs have an ethical duty towards society as a whole of weighing the benefits derived from his activity with the risks associated therewith". [1] The National Institute of Health's 2017 Procedures Manual for Health Research does not mention dual-use research. [2] Article 141 of the Health Code (Decree No. 955 of 1988) states "It is prohibited for owners, professional responsible persons and employees of public and private laboratories, autonomous or semi-autonomous; to cultivate or maintain in any form microorganisms or parasites that are carriers of diseases exotic to the country, unless the Ministry [of Health] expressly authorizes it for research purposes…". [3] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, Ministry of National Defense, National Council of Science and Technology, Verification Research, Training and Information Centre (VERTIC), and National Institute of Health do not contain additional public information regarding legislation and/or regulation requiring oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research. [4, 5, 6, 7, 8, 9] The national laboratory system does not have a website. [8] Although El Salvador submitted Confidence Building Measures reports in 2020, 2019 and 2018, access to

the reports is restricted (not available to the public), so it is not known what information they contain regarding this matter. [10]

[1] Biological Weapons Convention Meeting of States Parties. 2014. "BWC/MSP/2014/WP.6 'Código de Conducta para Científicos'".
[https://www.unog.ch/80256EDD006B8954/(httpAssets)/A0E89AEE9BA5731AC1257DA4003BB8A1/$file/BWC_MSP_2014_WP.6.pdf]. Accessed 13 February 2021.
[2] National Institute of Health (Instituto Nacional de Salud). 2017. "Procedures Manual for Health Research".
[http://ins.salud.gob.sv/wp-content/uploads/2018/02/Manual_Procedimientos_investigaciones_salud_2017.pdf]. Accessed 13 February 2021.
[3] Legislative Assembly (Asamblea Legislativa). 1988. "Health Code (Decree No. 955 of 1988)".
[https://www.vertic.org/media/National%20Legislation/El_Salvador/SV_Codigo_de_Salud.pdf]. Accessed 13 February 2021.
[4] Verification Research, Training and Information Centre (VERTIC). 2021. "El Salvador".
[https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/e/]. Accessed 11 February 2021.
[5] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. "Fuerza Armada de El Salvador".
[https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[7] National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología de El Salvador). 2021. "CONACYT".
[https://www.conacyt.gob.sv/]. Accessed 11 February 2021.
[8] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[9] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 10 February 2021.
[10] United Nations Office at Geneva. 2020. "BWC Electronic Confidence Building Measures Portal". [https://bwc-ecbm.unog.ch/state/el-salvador]. Accessed 11 February 2021.

1.5.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that El Salvador has an agency responsible for oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research. The websites of the Ministry of Health, Ministry of Agriculture and Ranching, Ministry of National Defense, National Council of Science and Technology, Verification Research, Training and Information Centre (VERTIC), and National Institute of Health do not contain additional public information regarding an agency responsible for oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research. [1, 2, 3, 4, 5, 6] The national laboratory system does not have a website. [2] Although El Salvador submitted Confidence Building Measures reports in 2020, 2019 and 2018, access to the reports is restricted (not available to the public), so it is not known what information they contain regarding this matter. [7]

[1] National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología de El Salvador). 2021. "CONACYT".
[https://www.conacyt.gob.sv/]. Accessed 11 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.

[3] National Institute of Health (Instituto Nacional de Salud). 2021. “INS”. [http://ins.salud.gob.sv/]. Accessed 10 February 2021.
[4] Verification Research, Training and Information Centre (VERTIC). 2021. “El Salvador”. [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/e/]. Accessed 11 February 2021.
[5] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. “Fuerza Armada de El Salvador”. [https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. “MAG”. [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[7] United Nations Office at Geneva. 2020. "BWC Electronic Confidence Building Measures Portal". [https://bwc-ecbm.unog.ch/state/el-salvador]. Accessed 11 February 2021.

1.5.2 Screening guidance for providers of genetic material

1.5.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that El Salvador has legislation and/or regulation requiring the screening of synthesized DNA (deoxyribonucleic acid) against lists of known pathogens and toxins before it is sold. El Salvador's 2008 Special Regulations for the Safe Handling of Genetically Modified Organisms (GMO) (Executive Decree No. 78) mention recombinant DNA, but do not reference to the sale or screening of DNA (synthetic or otherwise). [1] The Regulations outline a requirement for an environmental impact assessment permit for "the first transfer or cross-border transfer" of any GMO destined for genetic handling or production (Article 8), but no additional details are provided on whether the permit also requires screening. [1] Article 9 states that each GMO has its own biosafety norms and protocols, which are controlled by the Information Clearing House on Biotechnology Safety in El Salvador (CIISB). [1] The CIISB does not contain additional relevant public information. [2] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, Ministry of National Defense, National Council of Science and Technology, Verification Research, Training and Information Centre (VERTIC), and National Institute of Health do not contain additional public information regarding legislation and/or regulation requiring the screening of synthesized DNA against lists of known pathogens and toxins before it is sold. [3, 4, 5, 6, 7, 8] The national laboratory system does not have a website. [8] Although El Salvador submitted Confidence Building Measures reports in 2020, 2019 and 2018, access to the reports is restricted (not available to the public), so it is not known what information they contain regarding this matter. [9]

[1] Presidency of the Republic (Presidencia de la Republica). 2008. "Special Regulations for the Safe Handling of Genetically Modified Organisms (GMO) (Executive Decree No. 78)". [https://www.vertic.org/media/National%20Legislation/El_Salvador/SV_Reglamento_OGMs.pdf]. Accessed 14 February 2021.
[2] Ministry of the Environment and Natural Resources (Ministerio de Medio Ambiente y Recursos Naturales). 2021. "Introducción al centro de intercambio de información sobre seguridad de la biotecnología". [https://cidoc.marn.gob.sv/documentos/introduccion-al-centro-de-intercambio-de-informacion-sobre-seguridad-de-la-biotecnologia/]. Accessed 14 February 2021.
[3] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 10 February 2021.

[4] Verification Research, Training and Information Centre (VERTIC). 2021. "El Salvador". [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/e/]. Accessed 11 February 2021.
[5] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. "Fuerza Armada de El Salvador". [https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[7] National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología de El Salvador). 2021. "CONACYT". [https://www.conacyt.gob.sv/]. Accessed 11 February 2021.
[8] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[9] United Nations Office at Geneva. 2020. "BWC Electronic Confidence Building Measures Portal". [https://bwc-ecbm.unog.ch/state/el-salvador]. Accessed 11 February 2021.

1.6 IMMUNIZATION

1.6.1 Vaccination rates

1.6.1a

Immunization rate (measles/MCV2)

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

Current Year Score: 1

2019

World Health Organization

1.6.1b

Are official foot-and-mouth disease (FMD) vaccination figures for livestock publicly available through the OIE database?

Yes = 1 , No = 0

Current Year Score: 0

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 public evidence that El Salvador's national laboratory system has the capacity to conduct diagnostic tests for at least 5 of the 10 WHO-defined core tests; there is no public evidence that El Salvador has defined its country-specific core diagnostic tests. The National Reference Laboratory's webpage lists some of the diagnostic tests it can perform, including genotyping of HIV and tests for Salmonella spp., but does not provide more specific information. [1] Nonetheless, information specific to different diseases in El Salvador provides more details regarding in-country diagnostic testing capabilities. A 2010 epidemiological surveillance report documents that the country can test for influenza via PCR. [2] The Ministry of Health's (MINSAL) 2015 Technical Guidelines for the Prevention and Control of Immuno-preventable Diseases lists virus culture for poliovirus via the National Reference Laboratory as a diagnostic method to confirm the disease, which has been declared eradicated in El Salvador since 1994. [3] MINSAL's 2015 Procedures Manual for the Quality Control of Immuno-serological tests for STIs and HIV confirms that the country performs serology testing for HIV. [4] In 2005, MINSAL issued the Technical Guide for the Diagnosis of Tuberculosis by Direct Microscopy for performing the test in El Salvador. [5] A 2018 MINSAL presentation confirmed that the country can perform bacterial culture for Salmonella enteritidis serotype Typhi. [6] In terms of malaria, MINSAL's 2020 Clinical Guide for Comprehensive Care for Persons with Malaria states, "The Ministry of Health does not have rapid diagnostic tests". The guide focuses on use of microscopy smear methods for confirming malaria infection. [7] The websites of the Ministry of Health and National Institute of Health do not contain additional public information regarding El Salvador's country-defined core diagnostic tests. [8, 9] The national laboratory system does not have a website. [8]

[1] National Institute of Health (Instituto Nacional de Salud). 2021. "National Reference Laboratory". [http://ins.salud.gob.sv/laboratorio-nacional-de-referencia/]. Accessed 14 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2010. "Vigilancia Epidemiológica de Influenza y Otros Virus Respiratorios en El Salvador". [http://asp.salud.gob.sv/virus_gripeA_H1N1/pdf/boletines/boletin_prensa292010.pdf]. Accessed 14 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2015. "Technical Guidelines for the Prevention and Control of Immuno-preventable Diseases". [https://www.transparencia.gob.sv/institutions/minsal/documents/111778/download]. Accessed 14 February 2021.
[4] Ministry of Health (Ministerio de Salud). February 2015. "Procedures Manual for the Quality Control of Inmunoserological tests for STIs and HIV" ("MANUAL DE PROCEDIMIENTOS PARA EL CONTROL DE CALIDAD DE LAS PRUEBAS INMUNOSEROLÓGICAS PARA ITS y VIH"). [http://asp.salud.gob.sv/regulacion/pdf/manual/manual_calidad_pruebas_inmunoserologicasv2.pdf]. Accessed 14 February 2021.

[5] Ministry of Health (Ministerio de Salud). 2005. "Technical guide for the diagnosis of tuberculosis by direct microscopy" ("Guia técnica para el diagnostico de tuberculosis por microscopio directa"). [http://asp.salud.gob.sv/regulacion/pdf/guia/Guia_t%C3%A9cnica_tb_microscop%C3%ADa_directa.pdf]. Accessed 14 February 2021.
[6] Ministry of Health (Ministerio de Salud). 2018. "Dr y MSc René Guillermo Santos Fiebre Tifoidea". [https://www.salud.gob.sv/archivos/pdf/telesalud_2018_presentaciones/presentaciones15022018/01-Fiebre-Tifoidea.pdf]. Accessed 14 February 2021.
[7] Ministry of Health (Ministerio de Salud). 2020. "Clinical Guide for Comprehensive Care for Persons with Malaria". [http://asp.salud.gob.sv/regulacion/pdf/guia/guiaclinicaparalaatencionintegraldepersonasconmalaria-Acuerdo1010.pdf]. Accessed 14 February 2021.
[8] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[9] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 14 February 2021.

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 some public evidence that El Salvador has a national plan, strategy or similar document for conducting testing during a public health emergency (PHE), but there is insufficient evidence that it includes considerations for testing for novel pathogens, scaling capacity, and defining goals for testing.

The Ministry of Health's 2017 Emergency and Multi-Threat Disaster Response Plan includes epidemics and their possible transformation into a pandemic in its risk assessment but does not include provisions for conducting testing during a public health emergency. [1] MINSAL's 2014 Ebola Virus Contingency Plan includes some consideration of testing but mainly focuses on training laboratory and public health personnel to carry out diagnostic testing instead of novel pathogens, scaling capacity, and defining goals for testing. [2]

MINSAL's 2020 National Preparation and Response Plan for the Novel Coronavirus (2019 – nCov) outlines plans for testing during a PHE as well as during the "inter-pandemic phase" when there is no declared PHE. During the inter-pandemic phase MINSAL considers testing for novel pathogens, using its influenza sentinel testing program as well as referring acute respiratory infections of unknown cause to the National Reference Laboratory and international reference laboratories. [3] In addition, the Plan sets goals for testing in the event of a pandemic, stating that the National Reference Laboratory will only "process representative specimens for outbreaks (3 specimens maximum) and specimens from serious cases or deceased, with characteristics of clinical and epidemiological significance" because "it is not viable for any country to take and process 100% of specimens, for cases of an epidemic caused by any agent". [3] The Plan does not discuss scaling up testing capacity. [3]

The websites of the Ministry of Health, Ministry of Agriculture and Ranching, and National Institute of Health do not contain additional public information regarding a national plan, strategy or similar document for conducting testing during a public health emergency. [4, 5, 6] The national laboratory system does not have a website. [4]

[1] Ministry of Health (Ministerio de Salud). May 2017. "Ministry of Health's emergency and multi-threat disaster response plan" ("Plan de respuesta a emergencias y desastres con enfoque multiamenazas del Ministerio de Salud"). [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_de_respuesta_a_emergencia_y_desastres_enfoque_multiamenazas_v1.pdf]. Accessed 14 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2014. "Ebola Virus Contingency Plan". [https://www.salud.gob.sv/archivos/pdf/promocion_salud/material_educativo/campana_Ebola/Plan_de_Contingencia_Virus_Ebola.pdf]. Accessed 14 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2020. "National Preparation and Response Plan for the Novel Coronavirus (2019 – nCov)". [http://asp.salud.gob.sv/regulacion/pdf/planes/Plan-nacional-de-preparacion-y-resp-eventos-provocados-virus-resp-potencial-pandemico-svl-2020_v2.pdf]. Accessed 14 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[5] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 14 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 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: 0

There is insufficient public evidence that El Salvador's National Reference Laboratory (LNR) is accredited. The National Institute of Health (INS) houses the LNR, which is also known as the National Public Health Laboratory. [1, 2] The Food Quality Control and Toxicology Laboratory within the LNR is accredited to the ISO/IEC 17025-2017 "General requirements for the competence of testing and calibration laboratories" standard. [3] The accreditation covers 33 methodologies, all for food and soil testing. [3, 4] The accreditation does not cover the LNR's Public Health Surveillance Laboratory. [2, 3, 4] INS annual reports from 2012 to 2014 mention that the LNR was working to implement a quality control system under the ISO/IEC 15189:2012 standard, but there is no public evidence that this was achieved. [5, 6, 7] In 2017, the LNR participated in updating regulations to meet ISO/IEC 17025-2017 and ISO/IEC 15189:2012 standards. [8] The INS 2021 Manual of Organization of Functions states that one of the LNR's Public Health Surveillance Laboratory's functions is "to maintain a quality control system for continuous improvement, according to the current ISO/NTS 15189 standard and the Salvadorian Technical Regulation (NTS) for Good Laboratory Practices". [9] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, and National Institute of Health do not contain additional public information regarding accreditation of the LNR. [10, 11, 12] The national laboratory system does not have a website. [10]

[1] National Institute of Health (Instituto Nacional de Salud). 2021. "National Reference Laboratory". [http://ins.salud.gob.sv/laboratorio-nacional-de-referencia/]. Accessed 14 February 2021.
[2] National Institute of Health (Instituto Nacional de Salud). 2021. "Organizational Structure". [http://ins.salud.gob.sv/estructura-organizativa/]. Accessed 14 February 2021.
[3] National Institute of Health (Instituto Nacional de Salud). 2021. "Laboratorio Nacional de Salud Pública recibe renovación de acreditación de la Norma ISO/IEC 17025". [http://ins.salud.gob.sv/laboratorio-nacional-de-salud-publica-recibe-renovacion-de-acreditacion-de-la-norma-iso-iec-17025/]. Accessed 14 February 2021.
[4] Salvadorian Accreditation Organization (Organismo Salvadoreño de Acreditación). 2021. "Laboratorio de Alimentos y

Toxicología del Ministerio de Salud". [http://www.osa.gob.sv/descarga/at-minsal/]. Accessed 14 February 2021.
[5] National Institute of Health (Instituto Nacional de Salud). 2012. "2012 Annual Report". [http://ins.salud.gob.sv/wp-content/uploads/2018/06/INFORME-DE-LABORES-2012.pdf]. Accessed 14 February 2021.
[6] National Institute of Health (Instituto Nacional de Salud). 2013. "2013 Annual Report". [http://ins.salud.gob.sv/wp-content/uploads/2018/06/INFORME-DE-LABORES-2013.pdf]. Accessed 14 February 2021.
[7] National Institute of Health (Instituto Nacional de Salud). 2014. "2014 Annual Report". [http://ins.salud.gob.sv/wp-content/uploads/2018/06/INFORME-LABORES-INS-2014.pdf]. Accessed 14 February 2021.
[8] National Institute of Health (Instituto Nacional de Salud). 2017. "2017 Annual Report". [https://www.salud.gob.sv/wp-content/uploads/2017/07/MINSAL_Informe_de_Labores_2016_2017.pdf]. Accessed 14 February 2021.
[9] National Institute of Health (Instituto Nacional de Salud). 2021. "Manual of Organization of Functions". [http://asp.salud.gob.sv/regulacion/pdf/manual/manual_organizacion_funciones_instituto_nacional_salud_v1.pdf]. Accessed 14 February 2021.
[10] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[11] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 14 February 2021.
[12] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 2021.

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 public evidence that El Salvador's National Reference Laboratory (LNR) is subject to external quality assurance (EQA) review. The National Institute of Health (INS) houses the LNR, which is also known as the National Public Health Laboratory. [1, 2] The INS' 2014 Annual Report states that the LNR participates in EQA programs with multiple international laboratories, including the Center for Disease Control and Prevention in the United States, the Institute for Epidemiological Diagnosis and Reference (InDRE) in Mexico, the Malbran Institute in Argentina, the National Institute of Colombia, and others. [3, 4]

[1] National Institute of Health (Instituto Nacional de Salud). 2021. "National Reference Laboratory". [http://ins.salud.gob.sv/laboratorio-nacional-de-referencia/]. Accessed 14 February 2021.
[2] National Institute of Health (Instituto Nacional de Salud). 2021. "Organizational Structure". [http://ins.salud.gob.sv/estructura-organizativa/]. Accessed 14 February 2021.
[3] National Institute of Health (Instituto Nacional de Salud). 2014. "2014 Annual Report". [http://ins.salud.gob.sv/wp-content/uploads/2018/06/INFORME-LABORES-INS-2014.pdf]. Accessed 14 February 2021.
[4] National Institute of Health (Instituto Nacional de Salud). 2017. "Department of Specialized Laboratories" ("Departamento de Laboratorios Especializados"). [http://ins.salud.gob.sv/redes-de-laboratorios/]. Accessed 14 February 2021.

2.2 LABORATORY SUPPLY CHAINS

2.2.1 Specimen referral and transport system

2.2.1a

Is there a nationwide specimen transport system?

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient public evidence that El Salvador has a nationwide specimen transport system. The Ministry of Health's (MINSAL) 2013 Manual for Taking, Handling and Shipment of Laboratory Specimens describes the correct procedures for preparing specimens for transport but does not mention or describe a nationwide specimen transport system. [1] MINSAL's 2014 Ebola Virus Contingency Plan describes using national couriers and private air carriers to transport specimens to international reference laboratories but does not mention specific firms or agreements with them. As a "Plan B" the Plan mentions that the armed forces could be used to transport specimens internationally. [2] El Salvador's 2019 International Health Regulations (IHR) State Party self-assessment annual report scored the country at 100% for indicator "C5.1. Specimen referral and transport system". [3] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, and National Institute of Health do not contain additional public information regarding a nationwide specimen transport system. [4, 5, 6] The national laboratory system does not have a website. [4]

[1] Ministry of Health (Ministerio de Salud). October 2013. "Manual on taking, handling and sending laboratory samples" ("Manual de toma, manejo y envío de muestras de laboratorio"). [http://asp.salud.gob.sv/regulacion/pdf/manual/manual_toma_manejo_y_envio_muestras_laboratorio.pdf]. Accessed 14 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2014. "Ebola Virus Contingency Plan". [https://www.salud.gob.sv/archivos/pdf/promocion_salud/material_educativo/campana_Ebola/Plan_de_Contingencia_Virus_Ebola.pdf]. Accessed 14 February 2021.
[3] World Health Organization. 2019. "IHR Score per capacity - El Salvador". [https://extranet.who.int/e-spar/]. Accessed 11 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[5] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 14 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 2021.

2.2.2 Laboratory cooperation and coordination

2.2.2a

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

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

Current Year Score: 0

There is insufficient public evidence that El Salvador 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. The Ministry of Health's 2017 Emergency and Multi-Threat Disaster Response Plan includes epidemics and their possible transformation into a pandemic in its risk assessment but does not include provisions to scale-up testing during an outbreak. [1] MINSAL's 2014 Ebola Virus Contingency Plan includes some consideration of testing but mainly focuses on training laboratory and public health personnel to carry out diagnostic testing and does not include provisions to scale-up testing during an outbreak. [2] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, and National Institute of Health do not contain additional public information regarding 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. [3, 4, 5] The national laboratory system does not have a website. [4] MINSAL's 2020 National Preparation and Response Plan for the Novel

Coronavirus (2019 – nCov) outlines plans for testing during a public health emergency (PHE) as well as during the "inter-pandemic phase" when there is no declared PHE. However, the Plan does not include provisions to scale-up testing during an outbreak. [6] MINSAL's 2020 Technical Guidelines for Performing Diagnostic Tests for COVID-19 at Clinical Laboratories in the National Integrated Healthcare System establish requirements for private laboratories to carry out testing but does not describe a plan to use them to supplement testing capacity. [7]

[1] Ministry of Health (Ministerio de Salud). May 2017. "Ministry of Health's emergency and multi-threat disaster response plan" ("Plan de respuesta a emergencias y desastres con enfoque multiamenazas del Ministerio de Salud"). [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_de_respuesta_a_emergencia_y_desastres_enfoque_multiamenazas_v1.pdf]. Accessed 14 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2014. "Ebola Virus Contingency Plan". [https://www.salud.gob.sv/archivos/pdf/promocion_salud/material_educativo/campana_Ebola/Plan_de_Contingencia_Virus_Ebola.pdf]. Accessed 14 February 2021.
[3] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[5] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 14 February 2021.
[6] Ministry of Health (Ministerio de Salud). 2020. "National Preparation and Response Plan for the Novel Coronavirus (2019 – nCov)". [http://asp.salud.gob.sv/regulacion/pdf/planes/Plan-nacional-de-preparacion-y-resp-eventos-provocados-virus-resp-potencial-pandemico-svl-2020_v2.pdf]. Accessed 14 February 2021.
[7] Ministry of Health (Ministerio de Salud). 2020. "Technical Guidelines for Performing Diagnostic Tests for COVID-19 at Clinical Laboratories in the National Integrated Healthcare System". [http://asp.salud.gob.sv/regulacion/pdf/lineamientos/lineamientostecnicospararealizarpruebasparaeldiagnosticodeCOVID19enloslaboratoriosclinicosdelSNIS-Acuerdo1084.pdf]. Accessed 14 February 2021.

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: 1

There is public evidence that El Salvador conducts ongoing event-based surveillance (EBS), but no evidence that the data are being analyzed on a daily basis. Documents from the Pan American Health Organization's (PAHO) Unusual Respiratory Event Surveillance program show that El Salvador conducts EBS but do not provide evidence of daily analysis. [1, 2] El Salvador conducts event-based surveillance and analysis for unusual respiratory events, and all parts of the national health system, including private and public establishments participate in the surveillance. [1] El Salvador contributes data from its event-based surveillance to PAHO's National Surveillance of Unusual Respiratory Events or Unusual Severe Acute Respiratory Infection (SARI) System. [2] In September 2015, following PAHO recommendations, the Ministry of Health (MINSAL) conducted three trainings for clinical, epidemiology and laboratory personnel on EBS and detection of unusual respiratory illnesses. [3] El Salvador's 2019 International Health Regulations (IHR) State Party self-assessment annual report scored the

country at 100% for indicator "C6.1 Early warning function: indicator-and event-based surveillance". [4] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, and National Institute of Health do not contain additional public information regarding ongoing event-based surveillance. [5, 6, 7] The national laboratory system does not have a website. [7]

[1] Pan American Health Organisation (PAHO). 2014. "Surveillance of Respiratory Diseases in the Americas, Inaugural Meeting of SARInet" ("Vigilancia de Enfermedades Respiratorias en las Américas Reunión Inaugural de SARInet"). [https://www.paho.org/hq/dmdocuments/2014/2014-cha-sarinet-reunion-inaugural.pdf]. Accessed 14 February 2021.
[2] Pan American Health Organisation (PAHO). 2014. "Unusual Respiratory Event Surveillance Assessment: 2014". [https://www.paho.org/hq/dmdocuments/2014/2014-cha-unusual-respiratory-event-surveillance.pdf]. Accessed 14 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2016. "Boletín Epidemiológico Semana 06 (del 07 al 13 de Febrero 2016)". [http://w2.salud.gob.sv/archivos/vigi_epide2016/boletines_epidemilogicos2016/Boletin_epidemiologico_SE062016.pdf]. Accessed 14 February 2021.
[4] World Health Organization. 2019. "IHR Score per capacity - El Salvador". [https://extranet.who.int/e-spar/]. Accessed 11 February 2021.
[5] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 14 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[7] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.

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 no public evidence that El Salvador has reported a potential public health emergency of international concern (PHEIC) to the WHO within the last two years. The webpages of the World Health Organization (WHO) Disease Outbreak News (DON), WHO country page, and Pan American Health Organization country page do not contain reports of a PHEIC within the last two years. [1, 2, 3] In 2020, El Salvador reported the existence of Multisystem inflammatory syndrome (MIS) in children and adolescents related to COVID-19. [4] Public information regarding this condition does not state that it was classified as a PHEIC. [4, 5] The last report from El Salvador to WHO DON was a November 2015 report of Zika virus infection. [6] The website of the Ministry of Health does not contain additional public information regarding a potential public health emergency of international concern (PHEIC) reported to the WHO within the last two years. [7]

[1] World Health Organisation (WHO). 2021. "Disease Outbreak News: El Salvador". [https://www.who.int/csr/don/archive/country/slv/en/]. Accessed 14 February 2021.
[2] World Health Organisation (WHO). 2021. "El Salvador". [https://www.who.int/countries/slv/]. Accessed 14 February 2021.
[3] Pan American Health Organization. 2021. "El Salvador". [https://www.paho.org/es/salvador]. Accessed 14 February 2021.
[4] World Health Organization. 2021. "El Salvador – Strategic Partnership for IHR and Health Security (SPH)". [https://extranet.who.int/sph/country/el-salvador]. Accessed 14 February 2021.
[5] World Health Organisation (WHO). 2020. "Multisystem inflammatory syndrome in children and adolescents with COVID-19". [https://www.who.int/publications/i/item/multisystem-inflammatory-syndrome-in-children-and-adolescents-with-covid-19]. Accessed 14 February 2021.
[6] World Health Organisation (WHO). 2015. "Zika virus infection – El Salvador". [https://www.who.int/csr/don/27-

november-2015-zika-el-salvador/en/]. Accessed 14 February 2021.
[7] Ministry of Health (Ministerio de Salud). 2021. “MINSAL”. [https://www.salud.gob.sv/]. Accessed 10 February 2021.

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 El Salvador operates an electronic reporting surveillance system at both the national and the sub-national level. In 2019, the Ministry of Health (MINSAL) issued updated Technical Guidelines for the National Epidemiological Surveillance System (VIGEPES, "Sistema Nacional de Vigilancia Epidemiológica de El Salvador"). [1] VIGEPES is a mandatory tool used at all levels of the national health system (including all public and private healthcare providers) for the notification of diseases with mandatory reporting requirements. [1] MINSAL has used electronic reporting from the local level since 2005 and in 2011 moved to a decentralized electronic reporting system based on free software provided to all 1,234 local reporting units across the country, which includes public health facilities as well as non-governmental organizations and private healthcare facilities. [1] When necessary, electronic reporting is supplemented with telephone or fax-based reporting in order to meet daily and weekly reporting requirements. [1] VIGEPES has an online portal that can only be accessed by MINSAL personnel. [2]

[1] Ministry of Health (Ministerio de Salud). 2019. " Technical Guidelines for the National Epidemiological Surveillance System”.
[http://asp.salud.gob.sv/regulacion/pdf/lineamientos/lineamientostecnicossistemanacionaldevigilanciaepidemiologicavigepesv1.pdf]. Accessed 14 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2021. "VIGEPES". [https://vigepes.salud.gob.sv/]. Accessed 14 February 2021.

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 El Salvador's electronic reporting surveillance system collect ongoing or real-time laboratory data. In 2019, the Ministry of Health (MINSAL) issued updated Technical Guidelines for the National Epidemiological Surveillance System (VIGEPES, "Sistema Nacional de Vigilancia Epidemiológica de El Salvador"). [1] VIGEPES is a mandatory tool used at all levels of the national health system (including laboratories) for the notification of diseases with mandatory reporting requirements. [1] The National Reference Laboratory (LNR) is listed as one of VIGEPES' "three primary sources" of notification data. The LNR notifies the VIGEPES electronic system of both suspected and laboratory-confirmed cases of reportable diseases. [1] MINSAL's 2017 Manual for the Use of Laboratory Information and Surveillance Systems documents how laboratory data enters VIGEPES and can be consulted by authorized users across the system. [2] According to MINSA's VIGEPES Instructions Manual, there are two types of reporting, depending on the type of disease: within 24 hours (in which case forms are submitted individually), or on a weekly, consolidated basis. The notifications are then coordinated at different levels of the national health system, all through VIGEPES: local reporting feeds into the Basic Integrated Health System (SIBASI) at the departmental level, which is then communicated to the regional level, and, finally, to the central level under

the Directorate of Health Surveillance (Direccion de Vigilancia de Salud, DVS) at the Ministry of Health. [3]

[1] Ministry of Health (Ministerio de Salud). 2019. "Technical Guidelines for the National Epidemiological Surveillance System".
[http://asp.salud.gob.sv/regulacion/pdf/lineamientos/lineamientostecnicossistemanacionaldevigilanciaepidemiologicavigepesv1.pdf]. Accessed 14 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2017. "Manual for the Use of Laboratory Information and Surveillance Systems".
[http://ins.salud.gob.sv/wp-content/uploads/2019/03/31612-Vigilancia-Laboratorial-completo.pdf]. Accessed 14 February 2021.
[3] Ministry of Health (Ministerio de Salud). "Instructions manual on VIGEPES forms" ("Manual de Instrucciones para el llenado de formularios de Vigilancia"). [https://vigepes.salud.gob.sv/V-INSTRUCTIVO.pdf]. Accessed 24February 2021.

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

El Salvador has an electronic health records (EHR) system, but EHR are not commonly in use. According to the World Health Organization's 2016 eHealth scorecard for El Salvador, the country has had a nationwide EHR system since 2009, but as of 2016 it covered less than 25% of primary, secondary and tertiary care facilities. [1] As of 2018, the Ministry of Health (MINSAL) reported that its EHR system covered less than 25% of hospitals (seven of 30). [2] In 2019, MINSAL updated the Technical Regulations for the Creation, Custody and Consultation of Health Records (Agreement No. 941), which covers both physical and electronic records. [3] The websites of the Ministry of Health and National Institute of Health do not contain additional public information regarding EHR in El Salvador. [4, 5] The national laboratory system does not have a website. [4]

[1] World Health Organization. 2016. "El Salvador - eHealth'. [https://www.who.int/goe/publications/atlas/2015/slv.pdf]. Accessed 14 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2018. "Single Health Information System - SUIS".
[https://rrhh.salud.gob.sv/files/webfiles/foro2018/7_presentacion4fororecursoshumanosnov2018.pdf]. Accessed 14 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2019. "Technical Regulations for the Creation, Custody and Consultation of Health Records (Agreement No. 941)".
[http://asp.salud.gob.sv/regulacion/pdf/norma/normatecnicaconformacioncustodiaconsultaexpedienteclinico.pdf]. Accessed 14 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[5] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 14 February 2021.

2.4.1b

Does the national public health system have access to electronic health records of individuals in their country?

Yes = 1 , No = 0

Current Year Score: 1

There is public evidence that the national public health system has access to electronic health records of individuals in El Salvador. The national public health system provides access to electronic health records of individuals to authorized users, who are doctors, nurses, hospital staff, laboratory personnel, and other relevant personnel within the national public health system. According to a Pan American Health Organization update report from 2016, "El Salvador's national electronic health records system immediately provides secure information to authorized users." [1] In 2019, the Ministry of Health (MINSAL) updated the Technical Regulations for the Creation, Custody and Consultation of Health Records (Agreement No. 941), which covers both physical and electronic records. Article 3 states that MINSAL "will exercise authority regarding health records, with the ability to adopt the action and directives necessary for their proper safeguarding, custody and consultation". [2]

[1] Pan American Health Organization. 23 April 2016. "STRATEGY AND PLAN OF ACTION ON eHEALTH: MIDTERM REVIEW". [https://www.paho.org/hq/dmdocuments/2016/CE158-INF-13-A-e.pdf]. Accessed 14 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2019. "Technical Regulations for the Creation, Custody and Consultation of Health Records (Agreement No. 941)". [http://asp.salud.gob.sv/regulacion/pdf/norma/normatecnicaconformacioncustodiaconsultaexpedienteclinico.pdf]. Accessed 14 February 2021.

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 public evidence that El Salvador's electronic health records (EHR) system uses data standards to ensure data is comparable (e.g., ISO standards). In 2019, the Ministry of Health (MINSAL) updated the Technical Regulations for the Creation, Custody and Consultation of Health Records (Agreement No. 941), which covers both physical and electronic records. Article 3 states that MINSAL "will exercise authority regarding health records, with the ability to adopt the action and directives necessary for their proper safeguarding, custody and consultation". Chapter IV regulates EHR but does not require specific data standards to be used. Article 44 states that individual institutions are responsible for the structure of EHR, as long as they contain the information required by MINSAL and adhere to security principles. Article 75 recommends "compatibility and standardization of formats and documentation" as well as "metadata that identify and describe the data transferred" for sharing data between institutions but does not set any specific requirements. [1] The websites of the Ministry of Health and National Institute of Health do not contain additional public information regarding data standards for EHR in El Salvador. [2, 3] The national laboratory system does not have a website. [2]

[1] Ministry of Health (Ministerio de Salud). 2019. "Technical Regulations for the Creation, Custody and Consultation of Health Records (Agreement No. 941)". [http://asp.salud.gob.sv/regulacion/pdf/norma/normatecnicaconformacioncustodiaconsultaexpedienteclinico.pdf]. Accessed 14 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[3] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 14 February 2021.

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

2.4.2a

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

Yes = 1 , No = 0

Current Year Score: 1

There is public evidence that El Salvador has established mechanisms at the relevant ministries responsible for animal, human, and wildlife surveillance to share data. Article 161 of the 1988 Health Code created the National Technical Commission for Zoonosis, which includes three members from the Ministry of Health (MINSAL) and three from the Ministry of Agriculture and Ranching (MAG). The Commission is a coordination and supervisory body. [2] Decree No. 16 of 2019 issued the Commission's internal regulations. Article 5 tasks the Commission with "proposing technical regulations for prevention, control and eradication of zoonosis", "coordinating prevention, control, and/or eradication actions" for zoonoses, "establishing coordination mechanisms and support for the processing of specimens for diagnosis of different zoonoses", "proposing coordination procedures between MINSAL and MAG in order to improve response times in the event of an outbreak", and others. [2] A description of the Commission's activities on MINSAL's website lists "exchange of epidemiological information" as one of the "coordinated activities" that the Commission carries out. [3] In its 2016 Annual Report, MINSAL cited its successful coordination with MAG and epidemiological information received from the ministry in responding to cases of brucellosis, bovine tuberculosis, and anthrax in animals and preventing spread to humans. [4]

[1] Legislative Assembly (Asamblea Legislativa). 1988. "Health Code (Decree No. 955 of 1988)". [https://www.vertic.org/media/National%20Legislation/El_Salvador/SV_Codigo_de_Salud.pdf]. Accessed 15 February 2021.
[2] Presidency of the Republic (Presidencia de la Republica). 2019. "Decree No. 16 of 2019". [https://www.transparencia.gob.sv/institutions/capres/documents/296094/download]. Accessed 11 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2019. "Zoonosis Unit (Unidad de Zoonosis)". [http://usam.salud.gob.sv/index.php/temas/zoonosis]. Accessed 11 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2016. "2016 Annual Report". [https://www.transparencia.gob.sv/institutions/minsal/documents/198886/download]. Accessed 15 February 2021.

2.4.3 Transparency of surveillance data

2.4.3a

Does the country make de-identified health surveillance data on infectious diseases publicly available via reports (or other format) on government websites (such as the Ministry of Health, Ministry of Agriculture, or similar)?

Yes = 1 , No = 0

Current Year Score: 1

There is public evidence that El Salvador makes de-identified health surveillance data on disease outbreaks publicly available via reports (or other format) on government websites. The website of the Ministry of Health (MINSAL) contains weekly epidemiological bulletins from 2014 to present. [1] Bulletins generally include detailed information on a particular disease or condition, as well as situation updates on notifiable conditions, such as Zika, dengue, chikungunya, influenza, and others, as well as the results of sentinel surveillance of specific diseases. [2] As of February 2021, the most recently published bulletin covered the final week of January 2021. [1, 3]

[1] Ministry of Health (Ministerio de Salud). 2021. "Epidemiological Bulletins". [https://www.salud.gob.sv/boletines-epidemiologicos-2021/]. Accessed 15 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2019. "Boletín Epidemiológico Semana 22 (del 26 de Mayo al 1 de Junio de 2019)". [https://www.salud.gob.sv/download/boletin-epidemiologico-semana-22-del-26-de-mayo-al-01-de-junio-de-2019/?wpdmdl=51998&refresh=602ac6c0b79f41613416128]. Accessed 15 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2021. "Boletín Epidemiológico Semana 04 (del 24 al 30 de Enero 2021)". [https://www.salud.gob.sv/download/boletin-epidemiologico-semana-04-del-24-al-30-de-enero-de-2021/?wpdmdl=63486&refresh=602ac68ea97941613416078]. Accessed 15 February 2021.

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

There is public evidence that El Salvador makes de-identified health surveillance data on COVID-19 publicly available via daily reports (or other format) on government websites. The government's COVID-19 National Situation portal contains the most recent data on the front page, including the most recent day's new cases, recovered cases, deaths, and tests performed, as well as the cumulative figures for those measures as well. [1] In addition, the portal provides detailed daily reports with additional information on case numbers and locations, which can also be downloaded. [2] Finally, the portal also includes a risk map that grades municipalities based on five risk levels from "Very Low" to "Very High". [3]

[1] Government of El Salvador (GOBIERNO DE EL SALVADOR). 2021. "COVID-19 National Situation". [https://covid19.gob.sv/]. Accessed 15 February 2021.
[2] Government of El Salvador (GOBIERNO DE EL SALVADOR). 2021. "Daily data". [https://covid19.gob.sv/diarios/]. Accessed 15 February 2021.
[3] Government of El Salvador (GOBIERNO DE EL SALVADOR). 2021. "Risk Map". [https://covid19.gob.sv/mapa/]. Accessed 15 February 2021.

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

There is public evidence that El Salvador has legislation and regulations that safeguard the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities. Article 24 of the Access to Public Information Law (Legislative Decree No. 534 of 2010) states that "confidential information" includes "medical files which would constitute an invasion of personal privacy if divulged". [1] Regulations reference this legal basis for medical privacy. The Ministry of Health's (MINSAL) Guideline 4 on the Exercise of the Rights of Access, Correction and Suppression of Information Contained in Health Records and Confidentiality states in Article 6 that anyone involved in "compiling or maintaining" health records is "obligated to maintain secrecy regarding the personal data and information contained therein". [2] In 2019, MINSAL updated the Technical Regulations for the Creation, Custody and Consultation of Health

Records (Agreement No. 941), which covers both physical and electronic records. [3] Article 39 refers specifically to health information used in research, stating that the use of such information must "guarantee the right to confidentiality stipulated by law, and that the use of such information is exclusively for research purposes". [3]

[1] Legislative Assembly (Asamblea Legislativa). 2011. "Access to Public Information Law (Legislative Decree No. 534 of 2010)". [https://transparencia.asamblea.gob.sv/documentacion-transparencia/marco-normativo-1/laip-comentada]. Accessed 15 February 2021.
[2] Institute for Access to Public Information (Instituto de Acceso a la Información Pública). 2018. "Guideline 4 on the Exercise of the Rights of Access, Correction and Suppression of Information Contained in Health Records and Confidentiality". [https://www.transparencia.gob.sv/institutions/iaip/documents/293076/download]. Accessed 15 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2019. "Technical Regulations for the Creation, Custody and Consultation of Health Records (Agreement No. 941)". [http://asp.salud.gob.sv/regulacion/pdf/norma/normatecnicaconformacioncustodiaconsultaexpedienteclinico.pdf]. Accessed 15 February 2021.

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 El Salvador has legislation and regulations safeguarding the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities, that include mention of protections from cyber attacks. In 2019, MINSAL updated the Technical Regulations for the Creation, Custody and Consultation of Health Records (Agreement No. 941), which covers both physical and electronic records. [3] Article 39 refers specifically to health information used in research, stating that the use of such information must "guarantee the right to confidentiality stipulated by law, and that the use of such information is exclusively for research purposes". Article 40 establishes the obligation to employ information security measures to protect health data, stating "the institution must designate a person or various persons responsible for information security tasked with coordinating and controlling the measures to employ regarding totally or partially electronic health records". [1] In addition, the 2016 Special Law Against IT and Related Crimes established penalties for crimes including interfering with information systems (Article 6) and interfering with data (Article 20). Both articles specifically mention health information system and health data, respectively, treating them as aggravating circumstances and assigning stiffer punishments to such interference. [2]

[1] Ministry of Health (Ministerio de Salud). 2019. "Technical Regulations for the Creation, Custody and Consultation of Health Records (Agreement No. 941)". [http://asp.salud.gob.sv/regulacion/pdf/norma/normatecnicaconformacioncustodiaconsultaexpedienteclinico.pdf]. Accessed 15 February 2021.
[2] Legislative Assembly (Asamblea Legislativa). 26 February 2016. "Special law against IT and related crimes" ("Ley especial contra los delitos informaticos y conexos"). [https://www.asamblea.gob.sv/decretos/details/2688]. Accessed 15 February 2021.

2.4.5 International data sharing

2.4.5a

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

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

Current Year Score: 2

There is public evidence that El Salvador's government has 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, and this applies for more than one disease.

The Ministry of Health's (MINSAL) 2014 Ebola Virus Contingency Plan states that the government will "exchange epidemiological information at a national and international level" during an outbreak. [1] In addition, MINSAL's 2020 National Preparation and Response Plan for the Novel Coronavirus (2019 – nCov) instructs the ministry to "exchange epidemiological information internationally". [2] Via its participation in the Council of Health Ministers of Central America and the Dominican Republic (COMICSA), El Salvador has made additional commitments to share surveillance data during a public health emergency with other countries in the region. COMICSA's 2016-2020 regional health plan includes strengthening the Regional Health Surveillance Information Platform (Activity 6.3.3) and strengthening the regional health situation room by working on national epidemiological surveillance systems (Activity 8.1.1). [3] COVID-19 case data for El Salvador has appeared in the Central American Integration System's (SICA) periodic regional updates on the pandemic. [4]

[1] Ministry of Health (Ministerio de Salud). 2014. "Ebola Virus Contingency Plan". [https://www.salud.gob.sv/archivos/pdf/promocion_salud/material_educativo/campana_Ebola/Plan_de_Contingencia_Virus_Ebola.pdf]. Accessed 15 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2020. "National Preparation and Response Plan for the Novel Coronavirus (2019 – nCov)". [http://asp.salud.gob.sv/regulacion/pdf/planes/Plan-nacional-de-preparacion-y-resp-eventos-provocados-virus-resp-potencial-pandemico-svl-2020_v2.pdf]. Accessed 14 February 2021.
[3] Council of Health Ministers of Central America and the Dominican Republic (COMICSA). 2016. "Health Plan 2016-2020". [http://comisca.net/sites/default/files/PLAN%20DE%20SALUD%202016-2020.pdf]. Accessed 15 February 2021.
[4] Central American Integration System (SICA). 2020. "Report 29 Central America and Dominican Republic united against coronavirus COVID-19". [https://www.sica.int/documentos/informe-29-centroamerica-y-republica-dominicana-unida-contra-el-coronavirus-covid-19_1_123020.html]. Accessed 15 February 2021.

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: 2

There is public evidence that El Salvador has 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.

The Ministry of Health (MINSAL) operates 23 Rapid Response Teams (ERR) at the national, regional and district levels across El Salvador. [1, 2] The ERR are activated within 24 hours of notification of an outbreak and remain active until the event has been controlled. [1] In terms of contact tracing, the ERR operate sub-nationally and carry out contact tracing based on the requirements of the specific outbreak. For example, in 2018 MINSAL issued directives for ERR activation and contact tracing for outbreaks of measles and rubella, requiring ERR to establish a timeline for confirmed cases, determine the source of the infection, perform contact tracing in the community, and follow-up with contacts for up to 30 days. [2, 3] In 2020, MINSAL established similar requirements and activated the ERR across the country, with adjusted timelines based on the infectious period of the disease, for COVID-19 response. [4]

[1] Ministry of Health (Ministerio de Salud). April 2019. "Technical Guidelines for the Implementation of Rapid Response Teams (ERR)".
[http://asp.salud.gob.sv/regulacion/pdf/lineamientos/lineamientosimplementacionequiposrespuestarapida2019.pdf]. Accessed 15 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2018. "Preparation of Rapid Response Teams for the Regional Measles Epidemiological Situation".
[https://www.salud.gob.sv/archivos/pdf/telesalud_2018_presentaciones/presentaciones08022018/PREPARACION-DE-LOS-EQUIPOS-DE-RESPUESTA-RAPIDA-SITUACION-EPIDEMIOLOGICA-REGIONAL-SARAMPION.pdf]. Accessed 15 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2018. "Technical Guidelines for the Implementation of Rapid Response Interventions for an Outbreak of Measles and Rubella".
[https://www.transparencia.gob.sv/institutions/minsal/documents/234144/download]. Accessed 15 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2020. "National Plan for Preparation and Response to COVID-19".
[https://www.transparencia.gob.sv/institutions/minsal/documents/377745/download]. Accessed 15 February 2021.

2.5.1b

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

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

Current Year Score: 0

There is insufficient public evidence that El Salvador provides medical attention wraparound services to enable infected people and their contacts to self-isolate or quarantine as recommended, particularly medical attention. While there is some public evidence that the country has provided economic support for self-isolation during the COVID-19 pandemic, this does not include the entire population, and there is no indication that this support would apply to public health emergencies beyond COVID-19.

The Ministry of Health's (MINSAL) 2014 Ebola Virus Contingency Plan and 2017 Emergency and Multi-Threat Disaster Response Plan do not mention wraparound services to enable cases and suspected cases to self-isolate as recommended. [1, 2] The websites of the Ministry of Health and National Institute of Health do not contain additional public information regarding wraparound services to enable cases and suspected cases to self-isolate as recommended. [3, 4] The national

laboratory system does not have a website. [3]

In 2020, in response to the COVID-19 pandemic, the government provided “vulnerable families” with a US$300 per month stipend “in order to be able to survive quarantine”. The support was targeted at families in the informal economy. [5, 6] In addition, for workers in the formal economy, the Salvadorian Institute of Social Security “is obligated to cover a worker’s disability related to quarantine, during the time required for it”. [7] For workers in vulnerable situations due to age or health conditions, the Ministry of Labor is required to ensure that their employment is maintained in both the public and private sectors during the period that they cannot be physically present at their jobs. [7, 8]

[1] Ministry of Health (Ministerio de Salud). 2014. “Ebola Virus Contingency Plan”. [https://www.salud.gob.sv/archivos/pdf/promocion_salud/material_educativo/campana_Ebola/Plan_de_Contingencia_Virus_Ebola.pdf]. Accessed 15 February 2021.
[2] Ministry of Health (Ministerio de Salud). May 2017. "Ministry of Health's emergency and multi-threat disaster response plan" ("Plan de respuesta a emergencias y desastres con enfoque multiamenazas del Ministerio de Salud"). [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_de_respuesta_a_emergencia_y_desastres_enfoque_multiamenazas_v1.pdf]. Accessed 14 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2021. “MINSAL”. [https://www.salud.gob.sv/]. Accessed 10 February 2021.
[4] National Institute of Health (Instituto Nacional de Salud). 2021. “INS”. [http://ins.salud.gob.sv/]. Accessed 14 February 2021.
[5] Ministry of Health (Ministerio de Salud). 2020. “Obligatory Home Quarantine”. [https://covid19.gob.sv/wp-content/uploads/2020/03/22M-CO-Cuarentena-domiciliar-obligatoria.pdf.pdf]. Accessed 15 February 2021.
[6] Ministry of Health (Ministerio de Salud). 2020. “Decree No. 12”. [https://covid19.gob.sv/wp-content/uploads/2020/03/21M-Decreto-12.pdf.pdf]. Accessed 15 February 2021.
[7] Ministry of Health (Ministerio de Salud). 2020. “Response and Relief Plan”. [https://covid19.gob.sv/wp-content/uploads/2020/03/19M-CO-Plan-de-respuesta-y-alivio.pdf.pdf]. Accessed 15 February 2021.
[8] Ministry of Health (Ministerio de Salud). 2020. “Executive Decree No. 32”. [https://covid19.gob.sv/wp-content/uploads/2020/08/Decreto-Ejecutivo-No-32.pdf]. Accessed 15 February 2021.

2.5.1c

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

Yes = 1 , No = 0

Current Year Score: 1

There is public evidence that El Salvador makes 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. The government’s COVID-19 National Situation portal contains the most recent data on the front page, including the most recent day’s new cases, recovered cases, deaths, and tests performed, as well as the cumulative figures for those measures as well. In terms of de-identified contact tracing, the front page includes a pie chart that shows the number of cases confirmed via surveillance, contact tracing (epidemiological link, “nexo epidemiologico”), quarantine centers, and unknown (just one case as of February 2021. [1] In addition, the portal provides detailed daily reports with additional information, showing the number of daily confirmed cases from contact tracing and regular surveillance. For example, for February 14, 2021 12 of the 184 daily confirmed cases were from contact tracing, and the remaining 172 cases were from regular surveillance. [2] The front page also contains information on the number of confirmed cases by department and municipality. [1]

[1] Government of El Salvador (GOBIERNO DE EL SALVADOR). 2021. "COVID-19 National Situation". [https://covid19.gob.sv/]. Accessed 15 February 2021.
[2] Government of El Salvador (GOBIERNO DE EL SALVADOR). 2021. "Daily data". [https://covid19.gob.sv/diarios/]. Accessed 15 February 2021.

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 public evidence that El Salvador has a joint plan or cooperative agreement between the public health system and border control authorities to identify suspected and potential cases in international travelers and trace and quarantine their contacts during active public health emergencies.

Public evidence indicates that public health authorities are active at points of entry to respond to specific diseases, but there is no public evidence of joint plans or agreements between public health and border control authorities. In 2017, the Ministry of Health (MINSAL) issued the Technical Guidelines for the Prevention of HIV in Mobile Populations. The Guidelines evidence MINSAL's coordination with the General Directorate of Migration and Foreigners. HIV education, prevention and testing are carried out at 12 border crossings and ports of entry. [1]

MINSAL's 2017 Annual Report notes the participation of its International Health Offices, located at ports of entry, in these activities. [2] MINSAL's 2018 Technical Guidelines for the Implementation of Rapid Response Interventions for an Outbreak of Measles and Rubella include health promotion activities among populations, public health and border control personnel to detect and prevent cases. [3] El Salvador's 2019 International Health Regulations (IHR) State Party self-assessment annual report scored the country at 100% for indicator "C11.1 Core capacity requirements at all times for designated airports, ports and ground crossings" and 100% for indicator "C11.2 Effective public health response at points of entry". [4]

In 2020, the General Directorate of Migration and Foreigners publicized its inter-institutional coordination to detect and direct to quarantine possible cases of COVID-19 at ports of entry with MINSAL. [5] MINSAL's 2020 National Preparation and Response Plan for the Novel Coronavirus (2019 – nCov) states that the ministry activated its "rapid response in land, maritime and airport borders according to guidelines". [6] The websites of the Ministry of Health, National Institute of Health, and National Directorate of Migration and Foreigners do not contain additional public information regarding a joint plan or cooperative agreement between the public health system and border control authorities to identify suspected and potential cases in international travelers. [7, 8, 9] The national laboratory system does not have a website. [7]

[1] Ministry of Health (Ministerio de Salud). 2018. "Technical Guidelines for the Prevention of HIV in Mobile Populations". [https://www.transparencia.gob.sv/institutions/minsal/documents/222326/download]. Accessed 15 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2017. "2017 Annual Report". [https://www.salud.gob.sv/wp-content/uploads/2017/07/MINSAL_Informe_de_Labores_2016_2017.pdf]. Accessed 14 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2018. "Technical Guidelines for the Implementation of Rapid Response Interventions for an Outbreak of Measles and Rubella".

[https://www.transparencia.gob.sv/institutions/minsal/documents/234144/download]. Accessed 15 February 2021.
[4] World Health Organization. 2019. “IHR Score per capacity - El Salvador”. [https://extranet.who.int/e-spar/]. Accessed 11 February 2021.
[5] General Directorate of Migration and Foreigners (Direccion General de Migración y Extranjería). 2020. “Inter-institutional coordination at the service of the population”. [http://www.migracion.gob.sv/noticias/coordinacion-interinstiucional-al-servicio-de-la-poblacion/]. Accessed 15 February 2021.
[6] Ministry of Health (Ministerio de Salud). 2020. “National Preparation and Response Plan for the Novel Coronavirus (2019 – nCov)”. [http://asp.salud.gob.sv/regulacion/pdf/planes/Plan-nacional-de-preparacion-y-resp-eventos-provocados-virus-resp-potencial-pandemico-svl-2020_v2.pdf]. Accessed 14 February 2021.
[7] Ministry of Health (Ministerio de Salud). 2021. “MINSAL”. [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[8] National Institute of Health (Instituto Nacional de Salud). 2021. “INS”. [http://ins.salud.gob.sv/]. Accessed 10 February 2021.
[9] General Directorate of Migration and Foreigners (Direccion General de Migración y Extranjería). 2021. “Migration and Foreigners”. [http://www.migracion.gob.sv/]. Accessed 17 February 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 is public evidence that El Salvador offers applied epidemiology training program (such as FETP) in the country; there is no public evidence that the country provides resources to send citizens to another country to participate in applied epidemiology training programs. El Salvador's FETP program started in 2000 by CDC and USAID in the context of assistance after Hurricane Mitch. El Salvador's FETP is part of the CDC's regional program for Central America and was the first globally to provide three levels of training, aimed at developing local-, district- and national-level capacity simultaneously. The training is university-accredited and has reached more than 900 public health professionals in El Salvador since 2000. [1, 5] The Ministry of Health’s (MINSAL) Unit for Research and Field Epidemiology coordinates the FETP program. [2, 3] The websites of the MINSAL and Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET) do not contain additional information regarding the Salvadorian government using its resources to send citizens to another country to participate in applied epidemiology training programs. [4, 5]

[1] Ministry of Health (Ministerio de Salud). 2015. "FETP Monograph" ("Monografia del FETP"). [http://www.salud.gob.sv/archivos/DVS/uniec/publicaciones/Monografia_del_FETP_El_Salvador.pdf]. Accessed 15 February 2021.
[2] Ministry of Health (Ministerio de Salud). "Directorate of Health Surveillance, Unit on Research and Field Epidemiology" ("Direccion de Vigilancia Sanitaria, Unidad de Investigación y Epidemiología de Campo"). [http://www.salud.gob.sv/unidad-

de-investigacion-y-epidemiologia-de-campo-uniec/]. Accessed 15 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2021. “Manual of Organization and Functions of the Directorate of Health Surveillance”. [http://asp.salud.gob.sv/regulacion/pdf/manual/manual_organizacion_y_funciones_dvs.pdf]. Accessed 15 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2021. “MINSAL”. [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[5] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). 2021. “El Salvador Field Epidemiology Training Program”. [https://www.tephinet.org/training-programs/el-salvador-field-epidemiology-training-program]. Accessed 15 February 2021.

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: 0

There is no public evidence that El Salvador’s field epidemiology training programs are explicitly inclusive of animal health professionals or that there is there a specific animal health field epidemiology training program offered (such as FETPV). The Ministry of Health’s (MINSAL) Unit for Research and Field Epidemiology coordinates the FETP program. Public information regarding the program does not mention the participation of animal health professionals. [1, 2, 3, 4] The websites of the MINSAL and Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET) do not contain additional information regarding an animal health field epidemiology training program. [4, 5]

[1] Ministry of Health (Ministerio de Salud). 2015. "FETP Monograph" ("Monografia del FETP"). [http://www.salud.gob.sv/archivos/DVS/uniec/publicaciones/Monografia_del_FETP_El_Salvador.pdf]. Accessed 15 February 2021.
[2] Ministry of Health (Ministerio de Salud). "Directorate of Health Surveillance, Unit on Research and Field Epidemiology" ("Direccion de Vigilancia Sanitaria, Unidad de Investigación y Epidemiología de Campo"). [http://www.salud.gob.sv/unidad-de-investigacion-y-epidemiologia-de-campo-uniec/]. Accessed 15 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2021. “Manual of Organization and Functions of the Directorate of Health Surveillance”. [http://asp.salud.gob.sv/regulacion/pdf/manual/manual_organizacion_y_funciones_dvs.pdf]. Accessed 15 February 2021.
[4] Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET). 2021. “El Salvador Field Epidemiology Training Program”. [https://www.tephinet.org/training-programs/el-salvador-field-epidemiology-training-program]. Accessed 15 February 2021.
[5] Ministry of Health (Ministerio de Salud). 2021. “MINSAL”. [https://www.salud.gob.sv/]. Accessed 15 February 2021.

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: 1

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

There is public evidence that El Salvador has an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with epidemic or pandemic potential, and it is publicly available. The Ministry of Health's (MINSAL) 2017 Emergency and Multi-Threat Disaster Response Plan was previously used by El Salvador for outbreaks of dengue, Zika, AH1N1 Influenza (where it deployed rapid response teams) and chikungunya. The plan details overarching emergency response actions at each level of government (local, departmental and national) and training. It also has protocols to coordinate efforts between the Regional Emergency Operations Centers (EOCs) of the Ministry of Public Health and the Emergency Operations Center of the National System on Civil Protection, Prevention and Disaster Mitigation. [1] The plan provides guidelines on logistics, including inventory management, and financial resources. In addition, the plan directs the development of disease-specific contingency plans, operative manuals, and guidelines. [1] For example, in 2014, MINSAL issued its Ebola Virus Contingency Plan. [2] Similarly, MINSAL issued the National Preparation and Response Plan for the Novel Coronavirus (2019 – nCov) in 2020. [3]

[1] Ministry of Health (Ministerio de Salud). May 2017. “Emergency and Multi-Threat Disaster Response Plan” ("Plan de respuesta a emergencias y desastres con enfoque multiamenazas del Ministerio de Salud"). [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_de_respuesta_a_emergencia_y_desastres_enfoque_multiamenazas_v1.pdf]. Accessed 14 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2014. “Ebola Virus Contingency Plan”. [https://www.salud.gob.sv/archivos/pdf/promocion_salud/material_educativo/campana_Ebola/Plan_de_Contingencia_Virus_Ebola.pdf]. Accessed 15 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2020. “National Preparation and Response Plan for the Novel Coronavirus (2019 – nCov)”. [http://asp.salud.gob.sv/regulacion/pdf/planes/Plan-nacional-de-preparacion-y-resp-eventos-provocados-virus-resp-potencial-pandemico-svl-2020_v2.pdf]. Accessed 14 February 2021.

3.1.1b

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

Yes = 1 , No /no plan in place= 0

Current Year Score: 1

There is public evidence that El Salvador's overarching national public health emergency response plan has been updated in the last 3 years. The most recent public version of the Ministry of Health's (MINSAL) Emergency and Multi-Threat Disaster Response Plan, which covers epidemics and pandemics, was issued in May 2017. [1]

[1] Ministry of Health (Ministerio de Salud). May 2017. "Emergency and Multi-Threat Disaster Response Plan" ("Plan de respuesta a emergencias y desastres con enfoque multiamenazas del Ministerio de Salud"). [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_de_respuesta_a_emergencia_y_desastres_enfoque_multiamenazas_v1.pdf]. Accessed 14 February 2021.

3.1.1c

If an overarching plan is in place, does it include considerations for pediatric and/or other vulnerable populations?

Yes = 1 , No /no plan in place= 0

Current Year Score: 0

There is no public evidence that El Salvador's overarching national public health emergency response plan includes considerations for pediatric and/or other vulnerable populations. The Ministry of Health's (MINSAL) Emergency and Multi-Threat Disaster Response Plan, which covers epidemics and pandemics, does not specifically mention the pediatric population or how other vulnerable populations will be treated. [1] The Plan does not that "conditions of social inequality", such as limited access to basic services, as well as population density, can create "ecological niches" that are "favorable to the transmission of diseases that could potentially become epidemics". However, the Plan does not provide specific care indications for such populations. [1] The websites of the MINSAL and the General Directorate of Civil Protection, Prevention and Disaster Mitigation do not contain additional information regarding an overarching national public health emergency response plan that includes considerations for pediatric and/or other vulnerable populations. [2, 3]

[1] Ministry of Health (Ministerio de Salud). May 2017. "Emergency and Multi-Threat Disaster Response Plan" ("Plan de respuesta a emergencias y desastres con enfoque multiamenazas del Ministerio de Salud"). [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_de_respuesta_a_emergencia_y_desastres_enfoque_multiamenazas_v1.pdf]. Accessed 14 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[3] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil, Prevencion y Mitigación de Desastres). 2021. "Home". [http://proteccioncivil.gob.sv/]. Accessed 15 February 2021.

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 insufficient public evidence that El Salvador has specific mechanisms for engaging with the private sector to assist with outbreak emergency preparedness and response. The Ministry of Health's (MINSAL) 2017 Emergency and Multi-Threat Disaster Response Plan, which covers epidemics and pandemics, does not contain specific mechanisms for engaging with the private sector, while disease-specific plans contain some examples of cooperation. [1] The 1988 Health Code, Article 185, states that all private (as well as public) healthcare institutions are required to have an emergency plan that includes responding to an epidemic. [2] MINSAL's 2014 Ebola Virus Contingency Plan includes private healthcare providers in training activities for epidemiological surveillance of Ebola as well as trainings on handling infectious medical waste. [3] MINSAL's 2020 National Preparation and Response Plan for the Novel Coronavirus (2019 - nCov) states in its overall objective that its goal is to promote "concerted and coordinated actions of prevention, preparation and response among public, private, and international cooperation institutions". The Plan includes representatives of private healthcare facilities on its Sub-Committee for Epidemiological and Laboratory Surveillance. In addition, the Plan states that MINSAL will work with private firms to prevent the spread of COVID-19, including by including prevention messages on the monthly bills that private utility providers send to their customers. [4] The websites of the MINSAL and the General Directorate of Civil Protection, Prevention and Disaster Mitigation do not contain additional information regarding specific mechanisms for engaging with the private sector to assist with outbreak emergency preparedness and response. [5, 6]

[1] Ministry of Health (Ministerio de Salud). May 2017. "Emergency and Multi-Threat Disaster Response Plan" ("Plan de respuesta a emergencias y desastres con enfoque multiamenazas del Ministerio de Salud"). [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_de_respuesta_a_emergencia_y_desastres_enfoque_multiamenazas_v1.pdf]. Accessed 14 February 2021.
[2] Legislative Assembly (Asamblea Legislativa). 1988. "Health Code (Decree No. 955 of 1988)". [https://www.vertic.org/media/National%20Legislation/El_Salvador/SV_Codigo_de_Salud.pdf]. Accessed 15 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2014. "Ebola Virus Contingency Plan". [https://www.salud.gob.sv/archivos/pdf/promocion_salud/material_educativo/campana_Ebola/Plan_de_Contingencia_Virus_Ebola.pdf]. Accessed 15 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2020. "National Preparation and Response Plan for the Novel Coronavirus (2019 - nCov)". [http://asp.salud.gob.sv/regulacion/pdf/planes/Plan-nacional-de-preparacion-y-resp-eventos-provocados-virus-resp-potencial-pandemico-svl-2020_v2.pdf]. Accessed 14 February 2021.
[5] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[6] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil, Prevencion y Mitigación de Desastres). 2021. "Home". [http://proteccioncivil.gob.sv/]. Accessed 15 February 2021.

3.1.3 Non-pharmaceutical interventions planning

3.1.3a

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

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

Current Year Score: 2

There is public evidence that El Salvador has a policy, plan and/or guidelines in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic, which are in place for more than one disease.

MINSAL's 2008 Clinical Care Guide for Pandemic Influenza lists NPIs for healthcare settings such as cleaning practices, as well as for households and communities, but does not state that they can be used for other diseases. [4] Similarly, MINSAL's 2020 National Preparation and Response Plan for the Novel Coronavirus (2019 – nCov) lists social distancing and other NPIs but does not state that they can be used for other diseases. [5] The Ministry of Health's (MINSAL) 2017 Emergency and Multi-Threat Disaster Response Plan, which covers epidemics and pandemics, does not contain guidelines to implement NPIs. [1] The websites of the MINSAL and the General Directorate of Civil Protection, Prevention and Disaster Mitigation do not contain additional information regarding a policy, plan and/or guidelines to implement NPIs. [2, 3]

[1] Ministry of Health (Ministerio de Salud). May 2017. "Emergency and Multi-Threat Disaster Response Plan" ("Plan de respuesta a emergencias y desastres con enfoque multiamenazas del Ministerio de Salud"). [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_de_respuesta_a_emergencia_y_desastres_enfoque_multiamenazas_v1.pdf]. Accessed 14 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[3] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil, Prevencion y Mitigación de Desastres). 2021. "Home". [http://proteccioncivil.gob.sv/]. Accessed 16 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2008. "Clinical Care Guide for Pandemic Influenza". [https://www.transparencia.gob.sv/institutions/minsal/documents/205763/download]. Accessed 16 February 2021.
[5] Ministry of Health (Ministerio de Salud). 2020. "National Preparation and Response Plan for the Novel Coronavirus (2019 – nCov)". [http://asp.salud.gob.sv/regulacion/pdf/planes/Plan-nacional-de-preparacion-y-resp-eventos-provocados-virus-resp-potencial-pandemico-svl-2020_v2.pdf]. Accessed 14 February 2021.

3.2 EXERCISING RESPONSE PLANS

3.2.1 Activating response plans

3.2.1a

Does the country meet one of the following criteria?

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

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

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

Current Year Score: 1

There is public evidence that El Salvador has activated its national emergency response plan for an infectious disease outbreak in the past year and that the country has completed a biological threat-focused exercise in the past year.

On March 14, 2020, El Salvador's Legislative Assembly passed Decree No. 593, declaring a state of national emergency in the country due to the COVID-19 pandemic. Article 2 of the declaration instructed the Ministry of Health (MINSAL) "to execute all the necessary actions, in order to fulfill the Plan for Prevention, Containment and Response to the COVID-19 Pandemic". [1] In addition, on March 13, 2020, the General Directorate of Civil Protection, Prevention and Disaster Mitigation issued a "Red Alert" for the national emergency response system due to the COVID-19 pandemic, fully activating the national emergency response plan. [2]

In terms of a biological threat-focused exercise, in February 2020, MINSAL carried out an exercise to test and implement its emergency protocols in the event of an air passenger arriving infected with COVID-19. [3]

[1] Legislative Assembly (Asamblea Legislativa). 2020. "Decree No. 593". [https://www.transparencia.gob.sv/system/documents/documents/000/403/929/original/Decreto_593.pdf?1608219714]. Accessed 16 February 2021.
[2] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil, Prevencion y Mitigación de Desastres). 2020. "Red Alert for the evolution of COVID-19". [https://proteccioncivil.gob.sv/alerta-roja-por-evolucion-del-covid-19-13-marzo-2020/]. Accessed 16 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2020. "Ministry of Health carries out simulation of emergency protocols for epidemiological alert for coronavirus". [https://covid19.gob.sv/14-02-2020-ministerio-de-salud-realiza-simulacro-de-protocolos-de-emergencia-ante-la-alerta-epidemiologica-por-coronavirus/]. Accessed 16 February 2021.

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 no public evidence that El Salvador in the past year has identified a list of gaps and best practices in response (either through an infectious disease response of a biological-threat focused exercise) and developed a plan to improve response capabilities. The World Health Organization's (WHO) Health Security Calendar does not list any activities in the country from 2019-2021. [1] WHO's country page does not list any exercises during the last year. [2] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, WHO after action review page, and the General Directorate of Civil Protection, Prevention and Disaster Mitigation do not contain additional information regarding the country identifying a list of gaps and best practices in response (either through an infectious disease response of a biological-threat focused exercise) and developing a plan to improve response capabilities. [3, 4, 5, 6]

[1] World Health Organization. 2021. "Health Security Calendar". [https://extranet.who.int/sph/calendar]. Accessed 29 January 2021.
[2] World Health Organisation (WHO). 2021. "El Salvador". [https://www.who.int/countries/slv/]. Accessed 14 February 2021.
[3] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil,

Prevencion y Mitigación de Desastres). 2021. “Home”. [http://proteccioncivil.gob.sv/]. Accessed 16 February 2021.
[4] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. “MAG”. [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[5] Ministry of Health (Ministerio de Salud). 2021. “MINSAL”. [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[6] World Health Organization. 2021. “After Action Review”. [https://extranet.who.int/sph/after-action-review?region=All&country=254]. Accessed 29 January 2021.

3.2.2 Private sector engagement in exercises

3.2.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that El Salvador in the past year has undergone a national-level biological threat-focused exercise that has included private sector representatives. In February 2020, MINSAL carried out an exercise to test and implement its emergency protocols in the event of an air passenger arriving infected with COVID-19. Public information regarding the exercise does not mention the participation of private sector representatives. [1] The World Health Organization’s (WHO) After Action Review site, Simulation Exercise site, Health Security Calendar and El Salvador country page do not contain information regarding a national-level biological threat-focused exercise that has included private sector representatives. [2, 3, 4, 5] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, and the General Directorate of Civil Protection, Prevention and Disaster Mitigation do not contain additional information regarding a national-level biological threat-focused exercise that has included private sector representatives in the past year. [6, 7, 8].

[1] Ministry of Health (Ministerio de Salud). 2020. “Ministry of Health carries out simulation of emergency protocols for epidemiological alert for coronavirus”. [https://covid19.gob.sv/14-02-2020-ministerio-de-salud-realiza-simulacro-de-protocolos-de-emergencia-ante-la-alerta-epidemiologica-por-coronavirus/]. Accessed 16 February 2021.
[2] World Health Organisation (WHO). 2021. “El Salvador”. [https://www.who.int/countries/slv/]. Accessed 14 February 2021.
[3] World Health Organization. 2021. “Health Security Calendar”. [https://extranet.who.int/sph/calendar]. Accessed 29 January 2021.
[4] World Health Organization. 2021. “After Action Review”. [https://extranet.who.int/sph/after-action-review?region=All&country=254]. Accessed 29 January 2021.
[5] World Health Organization. 2021. "Simulation Exercise". [https://extranet.who.int/sph/simulation-exercise?region=203&country=257]. Accessed 29 January 2021.
[6] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil, Prevencion y Mitigación de Desastres). 2021. “Home”. [http://proteccioncivil.gob.sv/]. Accessed 16 February 2021.
[7] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. “MAG”. [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[8] Ministry of Health (Ministerio de Salud). 2021. “MINSAL”. [https://www.salud.gob.sv/]. Accessed 15 February 2021.

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

There is public evidence that El Salvador has in place a national level Emergency Operations Center (EOC) within the Ministry of Health's headquarters for all health-related emergencies, including epidemics and pandemics, as well as health emergency response for natural disasters. [1] The Health EOC coordinates emergency health response with the country's five regional health EOCs, as well as with the EOC of the National System on Civil Protection, Prevention and Disaster Mitigation (Centro de Operaciones de Emergencia Nacional). [1] The latter is housed under the General Directorate for Civil Protection, and Disaster Prevention and Mitigation and is the central command for all disaster emergency response coordination, including natural disasters. [2]

[1] Ministry of Health (Ministerio de Salud). May 2017. “Emergency and Multi-Threat Disaster Response Plan” ("Plan de respuesta a emergencias y desastres con enfoque multiamenazas del Ministerio de Salud"). [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_de_respuesta_a_emergencia_y_desastres_enfoque_multiamenazas_v1.pdf]. Accessed 16 February 2021.
[2] General Directorate for Civil Protection, and Disaster Prevention and Mitigation (Dirección General de Protección Civil, Prevención y Mitigación de Desastres). "Regulation on the Functions of the Commissions of the National System for Civil Protection and the Prevention and Mitigation of Disasters" ("Reglamento de Funcionamiento de las Comisiones del Sistema Nacional de Protección Civil, Prevención y Mitigación de Desastres"). [http://proteccioncivil.gob.sv/descargas-leyes-y-reglamentos/]. Accessed 16 February 2021.

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 public evidence that El Salvador’s Emergency Operations Center (EOC) within the Ministry of Health (MINSAL) is required to conduct a drill for a public health emergency (PHE) scenario at least once per year or has conducted a drill at least once per year.

MINSAL’s 2017 Emergency and Multi-Threat Disaster Response Plan, which describes the functioning of the Health EOC does not describe a requirement for an annual PHE drill. [1] MINSAL’s annual reports do not mention a drill involving the Health EOC. [2] Reports on simulation exercises carried out in 2018 and 2020 do not mention the involvement of the Health EOC. [3, 4] Annual reports from the Ministry of Governance, which houses the General Directorate for Civil Protection, and Disaster Prevention and Mitigation do not mention annual PHE drills. [5] The websites of the Ministry of Health and the General Directorate of Civil Protection, Prevention and Disaster Mitigation do not contain additional public information regarding a requirement to conduct a drill for PHE scenario at least once per year or that such a drill has occurred once per year. [6, 7]

[1] Ministry of Health (Ministerio de Salud). May 2017. “Emergency and Multi-Threat Disaster Response Plan” ("Plan de respuesta a emergencias y desastres con enfoque multiamenazas del Ministerio de Salud"). [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_de_respuesta_a_emergencia_y_desastres_enfoque_multiamenazas_v1.pdf]. Accessed 16 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2021. “Annual reports”. [https://www.salud.gob.sv/informes-de-labores-y-rendiciones-de-cuentas/]. Accessed 16 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2020. “Ministry of Health carries out simulation of emergency protocols for epidemiological alert for coronavirus”. [https://covid19.gob.sv/14-02-2020-ministerio-de-salud-realiza-simulacro-de-protocolos-de-emergencia-ante-la-alerta-epidemiologica-por-coronavirus/]. Accessed 16 February 2021.
[4] Pan American Health Organization. 2018. “El Salvador 2018 Technical Cooperation Activities”. [https://www.paho.org/es/documentos/salvador-actividades-cooperacion-tecnica-2018]. Accessed 16 February 2021.
[5] Ministry of Governance (Ministerio de Gobernacion). 2021. “Reports”. [https://www.gobernacion.gob.sv/?sdm_categories=informes]. Accessed 16 February 2021.
[6] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil, Prevencion y Mitigación de Desastres). 2021. “Home”. [http://proteccioncivil.gob.sv/]. Accessed 16 February 2021.
[7] Ministry of Health (Ministerio de Salud). 2021. “MINSAL”. [https://www.salud.gob.sv/]. Accessed 15 February 2021.

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 El Salvador’s Emergency Operations Center (EOC) within the Ministry of Health (MINSAL) 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. MINSAL’s annual reports do not mention a drill involving the Health EOC. [1] Annual reports from the Ministry of Governance, which houses the General Directorate for Civil Protection, and Disaster Prevention and Mitigation do not mention annual PHE drills. [2] Reports on simulation exercises carried out in 2018 and 2020 do not mention the involvement of the Health EOC or a response within 120 minutes. [3, 4] The websites of the Ministry of Health and the General Directorate of Civil Protection, Prevention and Disaster Mitigation do not contain additional public information regarding a coordinated emergency response or emergency response exercise activated within 120 minutes of the identification of the public health emergency/scenario. [5, 6]

[1] Ministry of Health (Ministerio de Salud). 2021. “Annual reports”. [https://www.salud.gob.sv/informes-de-labores-y-rendiciones-de-cuentas/]. Accessed 16 February 2021.
[2] Ministry of Governance (Ministerio de Gobernacion). 2021. “Reports”. [https://www.gobernacion.gob.sv/?sdm_categories=informes]. Accessed 16 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2020. “Ministry of Health carries out simulation of emergency protocols for epidemiological alert for coronavirus”. [https://covid19.gob.sv/14-02-2020-ministerio-de-salud-realiza-simulacro-de-protocolos-de-emergencia-ante-la-alerta-epidemiologica-por-coronavirus/]. Accessed 16 February 2021.
[4] Pan American Health Organization. 2018. “El Salvador 2018 Technical Cooperation Activities”. [https://www.paho.org/es/documentos/salvador-actividades-cooperacion-tecnica-2018]. Accessed 16 February 2021.
[5] Ministry of Health (Ministerio de Salud). 2021. “MINSAL”. [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[6] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil,

Prevencion y Mitigación de Desastres). 2021. “Home”. [http://proteccioncivil.gob.sv/]. Accessed 16 February 2021.

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 no public evidence that El Salvador’s public health and national security authorities have carried out an exercise to respond to a potential deliberate biological event (i.e., bioterrorism attack) or that there are 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. According to the WHO’s International Health Regulations portal, El Salvador received technical support from Argentina’s National Service for Agricultural Health and Quality (SENASA). One of the areas supported was “Linking Public Health and Security Authorities”. However, no additional public information regarding this item is available. [1] The websites of the Ministry of Health and the General Directorate of Civil Protection, Prevention and Disaster Mitigation do not contain additional public information regarding a joint bioterrorism simulation or 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. [2, 3]

[1] World Health Organization. 2021. “El Salvador – Strategic Partnership for IHR and Health Security (SPH)”. [https://extranet.who.int/sph/country/el-salvador]. Accessed 14 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2021. “MINSAL”. [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[3] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil, Prevencion y Mitigación de Desastres). 2021. “Home”. [http://proteccioncivil.gob.sv/]. Accessed 16 February 2021.

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

There is some public evidence that El Salvador's risk communications planning documents outline how messages will reach populations and sectors with different communications needs. The Ministry of Health's (MINSAL) Strategic Plan for Information, Education and Communication for the Prevention and Control of Tuberculosis 2008-2015 segments the audience into two groups: the Primary Target Population and the Secondary Target Population. The Primary Target Population includes symptomatic individuals and those at risk of contracting tuberculosis based on their living conditions, which the Plan further specifies by naming specific population groups such as family members of diagnosed individuals and individuals with comorbidities. The Secondary Target Population is defined as groups and community members that can transmit "positive messages" to at-risk populations, such as community health workers and non-governmental organizations. [1] Similarly, MINSAL's 2015 Strategy for Information, Education and Communication for the Treatment of Dengue, Chikungunya and Zika includes a "focus on different population groups", such as individuals, families and communities; and government, community, and development workers. The Strategy employs an "Audience Diagnostic" to identify the communications needs of different populations, including living conditions, customs, myths and beliefs, knowledge level, social problems, and health conditions, in order to "build messages with appropriate language and relevance according to each audience". [2]

[1] Ministry of Health (Ministerio de Salud). 2008. "the Strategic Plan for Information, Education and Communication for the Prevention and Control of Tuberculosis 2008-2015".
[https://www.salud.gob.sv/archivos/pdf/TUBERCULOSIS_DOC/Planes_Estrategicos/Plan_estrategico_de_IEC_2008_2015.pdf]
. Accessed 17 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2015. "Strategy for Information, Education and Communication for the Treatment of Dengue, Chikungunya and Zika".
[http://asp.salud.gob.sv/regulacion/pdf/estrategias/estrategia_iec_dengue_chik_zika.pdf]. Accessed 17 February 2021.

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

There is some public evidence that El Salvador has in place in various disease-specific health emergency response plans, sections detailing a risk communication plan that is specifically intended for use during a public health emergency. In 2008, the Ministry of Health (MINSAL) issued the Strategic Plan for Information, Education and Communication for the Prevention and Control of Tuberculosis 2008-2015. The Plan details a risk communications strategy, including specific goals, such as 85% of individuals detected with tuberculosis having received information regarding "the importance of complying with treatment, recovery and lifestyle changes" and 70% of the general population informed about diagnostic and treatment of tuberculosis. The Plan also segments the population in target groups. [1] In 2015, MINSAL issued the Strategy for Information, Education and Communication for the Treatment of Dengue, Chikungunya and Zika. The Strategy's lines of action regarding risk communications include Promoting healthy lifestyles, Targeting different population groups, Co-responsibility and social commitment, Citizen and inter-sectorial participation, Diagnostic of audiences, and Sustainability. [2] In 2018, MINSAL presented its response to the regional measles situation, including "Risk communications management", stating that MINSAL and its Rapid Response Teams (ERR) would engage in "permanent dialog with the population (target audiences for communication)" and provide the necessary information for "informed decisions". [3] Part of MINSAL's response planning to the 2020 COVID-19 pandemic includes a strategy for information to share "information about the risks

and impacts of the pandemic", including "guidelines for health workers for self-care and mental health practices", "material to support households in obligatory self-isolation", and videos, radio spots, infographic, social media and other risk communication materials. [4]

[1] Ministry of Health (Ministerio de Salud). 2008. "the Strategic Plan for Information, Education and Communication for the Prevention and Control of Tuberculosis 2008-2015".
[https://www.salud.gob.sv/archivos/pdf/TUBERCULOSIS_DOC/Planes_Estrategicos/Plan_estrategico_de_IEC_2008_2015.pdf]. Accessed 17 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2015. "Strategy for Information, Education and Communication for the Treatment of Dengue, Chikungunya and Zika".
[http://asp.salud.gob.sv/regulacion/pdf/estrategias/estrategia_iec_dengue_chik_zika.pdf]. Accessed 17 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2018. "Preparation of Rapid Response Teams for the Regional Measles Epidemiological Situation".
[https://www.salud.gob.sv/archivos/pdf/telesalud_2018_presentaciones/presentaciones08022018/PREPARACION-DE-LOS-EQUIPOS-DE-RESPUESTA-RAPIDA-SITUACION-EPIDEMIOLOGICA-REGIONAL-SARAMPION.pdf]. Accessed 17 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2020. "COVID-19 Response Project – El Salvador Stakeholder Engagement Plan".
[http://asp.salud.gob.sv/regulacion/pdf/otrosdoc/Proyecto-de-respuesta-al-COVID-19-El-Salvador-Plan-de-participacion-de-partes-interesadas-BM.pdf]. Accessed 17 February 2021.

3.5.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient public evidence that El Salvador's risk communications planning documents designate a specific position within the government to serve as the primary spokesperson to the public during a public health emergency. The Ministry of Health's (MINSAL) Strategic Plan for Information, Education and Communication for the Prevention and Control of Tuberculosis 2008-2015 and 2015 Strategy for Information, Education and Communication for the Treatment of Dengue, Chikungunya and Zika do not name a primary spokesperson. [1, 2] MINSAL's 2014 Ebola Virus Contingency Plan does not name a primary spokesperson but includes an activity "to define official spokespersons", listing possibilities including the Minister of Health, vice-ministers, and director of the Directorate of Health Surveillance. [3] The websites of the Ministry of Health and the General Directorate of Civil Protection, Prevention and Disaster Mitigation do not contain additional public information regarding the designation of a specific position within the government to serve as the primary spokesperson to the public during a public health emergency. [4, 5] MINSAL's 2020 National Preparation and Response Plan for the Novel Coronavirus (2019 – nCov) also includes an activity to define a primary spokesperson, tasking the Office of the Minister of Health to identify the spokesperson. [6]

[1] Ministry of Health (Ministerio de Salud). 2008. "the Strategic Plan for Information, Education and Communication for the Prevention and Control of Tuberculosis 2008-2015".
[https://www.salud.gob.sv/archivos/pdf/TUBERCULOSIS_DOC/Planes_Estrategicos/Plan_estrategico_de_IEC_2008_2015.pdf]. Accessed 17 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2015. "Strategy for Information, Education and Communication for the Treatment of Dengue, Chikungunya and Zika".
[http://asp.salud.gob.sv/regulacion/pdf/estrategias/estrategia_iec_dengue_chik_zika.pdf]. Accessed 17 February 2021.

[3] Ministry of Health (Ministerio de Salud). 2014. “Ebola Virus Contingency Plan”. [https://www.salud.gob.sv/archivos/pdf/promocion_salud/material_educativo/campana_Ebola/Plan_de_Contingencia_Virus_Ebola.pdf]. Accessed 15 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2021. “MINSAL”. [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[5] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil, Prevencion y Mitigación de Desastres). 2021. “Home”. [http://proteccioncivil.gob.sv/]. Accessed 16 February 2021.
[6] Ministry of Health (Ministerio de Salud). 2020. “National Preparation and Response Plan for the Novel Coronavirus (2019 – nCov)”. [http://asp.salud.gob.sv/regulacion/pdf/planes/Plan-nacional-de-preparacion-y-resp-eventos-provocados-virus-resp-potencial-pandemico-svl-2020_v2.pdf]. Accessed 14 February 2021.

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 public evidence that El Salvador’s 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 in the past year. The Ministry of Health (MINSAL) has maintained active social media accounts online since 2010 (Twitter) and 2011 (Facebook). [1, 2] During 2020-21, MINSAL has posted regarding prevention measures for COVID-19 as well as updates regarding spread, testing, and containment measures. [1, 2] Other health messages include blood donation and updated health guidelines for stomach illnesses. [1, 2] In addition, MINSAL posts press releases and news on its website. [3, 4] News items include surveillance regarding rumors of a suspected case of measles and training for response and care regarding the Zika virus. [5, 6] A 2016 report from the Pan America Health Organization included El Salvador among 18 countries that “use social networks, mainly Twitter and Facebook, both in emergencies and as a way to promote health and disease prevention”. [7]

[1] Ministry of Health (Ministerio de Salud). 2021. “@SaludSV”. [https://twitter.com/SaludSV]. Accessed 17 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2021. “@Salud.SV”. [https://www.facebook.com/salud.sv]. Accessed 17 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2021. “Press Releases”. [https://www.salud.gob.sv/category/novedades/comunicados-de-prensa/]. Accessed 17 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2021. “Citizen News”. [https://www.salud.gob.sv/category/novedades/noticias/ciudadanosas/]. Accessed 17 February 2021.
[5] Ministry of Health (Ministerio de Salud). April 2019. “El Salvador intensifies surveillance regarding rumor of a suspected case of measles”. [https://www.salud.gob.sv/12-04-2019-el-salvador-intensifica-la-vigilancia-ante-el-rumor-de-un-caso-sospechoso-de-sarampion/]. Accessed 17 February 2021.
[6] Ministry of Health (Ministerio de Salud). April 2019. “Health personnel from different institutions train for Zika”. [https://www.salud.gob.sv/09-04-2019-personal-de-salud-de-distintas-instituciones-se-capacitan-sobre-zika/]. Accessed 17 February 2021.
[7] Pan American Health Organization. 23 April 2016. "STRATEGY AND PLAN OF ACTION ON eHEALTH: MIDTERM REVIEW".

[https://www.paho.org/hq/dmdocuments/2016/CE158-INF-13-A-e.pdf]. Accessed 17 February 2021.

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: 0

There is some public evidence that senior leaders in El Salvador have shared misinformation or disinformation on infectious diseases in the past two years. In January 2021, an analysis of 12,700 social media publications from the President of El Salvador and other official accounts belonging to the executive branch of government stated that the government had employed "a strategy to create confusion or ignorance" regarding COVID-19. Among the practices used, the analysis cited "disinformation" and "discrediting of others". [1] In a specific case cited in the analysis, the president stated that quarantine sites for returning Salvadorians were being used to isolate "potential positive cases" and that letting these individuals move freely would "spread the virus". However, some individuals were quarantined for up to 50 days after multiple negative tests, beyond the recommended isolation time according to the WHO. [2] The president also stated in June 2020 that a new hospital would have 400 intensive care units (ICU) for treating COVID-19 patients and was later corrected by the hospital's ICU chief that the real figure was 105 beds, although the president continued to cite the incorrect figure. [3] Regarding hydroxychloroquine as a treatment for COVID-19, the president stated that the government had purchased it, although per WHO recommendations it was not part of the official treatment regimen, but doctors were allowed to prescribe it. The president stated that he used it as a "prophylactic", just as "the majority of world leaders use it". [4] According to national news media, the Minister of Health stated that 100 "frontline health workers" had died from COVID-19 as of September 2020. Civil society and professional organizations disputed that figure, with one calculating that there had been 132 deaths of medical personnel. According to the minister, the difference was due to how frontline health workers were defined. [5]

[1] EFE Agency. 2021. "Bukele used disinformation to handle the pandemic according to a study". [https://www.efe.com/efe/america/politica/bukele-echo-mano-de-la-desinformacion-para-manejar-pandemia-segun-un-estudio/20000035-4439684]. Accessed 17 February 2021.
[2] El Diario de Hoy. 2021. "Government violated human rights in the COVID pandemic". [https://www.elsalvador.com/eldiariodehoy/gobierno-violo-derechos-humanos-en-pandemia-covid/795630/2021/]. Accessed 17 February 2021.
[3] El Diario de Hoy. 2020. "Letter to those who are impressed by numbers: Careful, there's a con artist in power". [https://www.elsalvador.com/opinion/cartas-de-paolo/carta-paolo-luers-mentiras-bukele/748327/2020/]. Accessed 17 February 2021.
[4] Diario El Mundo. 2020. "Bukele says the purchase of hydroxychloroquine for the COVID-19 emergency cost $575 thousand not million". [https://diario.elmundo.sv/bukele-dice-compra-de-hidroxicloroquina-para-emergencia-por-covid-19-costo-575-mil-y-no-millones/]. Accessed 17 February 2021.
[5] La Prensa Grafica. 2020. "Alabi admits 100 deaths of health personnel and says that the data are handled with care to avoid disinformation". [https://www.laprensagrafica.com/elsalvador/Alabi-admite-100-muertes-en-personal-sanitario-y-dice-que-datos-se-manejan-con-prudencia-para-evitar-desinformacion-20200907-0072.html]. Accessed 17 February 2021.

3.6 ACCESS TO COMMUNICATIONS INFRASTRUCTURE

3.6.1 Internet users

3.6.1a

Percentage of households with Internet

Input number

Current Year Score: 33.82

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: 146.91

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: 9.0

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: 14.0

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: 1

There is no public evidence that El Salvador, in the past year, has 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. The World Trade Organization's "COVID-19: Measures affecting trade in goods" webpage does not list any trade restrictions imposed by El Salvador, nor does a similar dataset from Bloomberg Law. [1, 2] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, Ministry of Exterior Relations, and Ministry of the Treasury (which contains the General Directorate of Customs) do not contain additional public information regarding a restriction, without international/bilateral support, on the export/import of medical goods due to an infectious disease outbreak. [3, 4, 5, 6] Local news media do not contain public information regarding this topic. [7, 8, 9]

[1] World Trade Organization. 2020. "COVID-19: Measures affecting trade in goods". [https://www.wto.org/english/tratop_e/covid19_e/trade_related_goods_measure_e.htm]. Accessed 31 January 2021.
[2] Bloomberg Law. 2020. "International Trade Covid-19 Developments". [https://www.bloomberglaw.com/product/health/document/XDL12EUG000000#St.%20Vincent]. Accessed 31 January 2021.
[3] Ministry of Exterior Relations (Ministerio de Relaciones Exteriores). 2021. "RR.EE.". [https://rree.gob.sv/]. Accessed 17 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[5] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. "MAG". [http://www.mag.gob.sv/]. Accessed 11 February 2021.
[6] Ministry of the Treasury (Ministerio de Hacienda). 2021. "MH". [https://www.mh.gob.sv/pmh/es/]. Accessed 17 February 2021.
[7] El Diario de Hoy. 2021. "Home". [https://www.elsalvador.com/]. Accessed 17 February 2021.
[8] Diario El Mundo. 2021. "Home". [https://diario.elmundo.sv/]. Accessed 17 February 2021.
[9] La Prensa Grafica. 2021. "Home". [https://www.laprensagrafica.com/]. Accessed 17 February 2021.

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: 0

There is public evidence that El Salvador, in the past year, has issued a restriction, without international/bilateral support, on the export/import of non-medical goods (eg: food, textiles, etc) due to an infectious disease outbreak. The World Trade Organization's (WTO) "COVID-19: Measures affecting trade in goods" webpage and a similar dataset from Bloomberg Law

show that El Salvador restricted export and re-export of dried red beans from March to December 2020 as a result of the COVID-19 pandemic. [1, 2] El Salvador reported the measure to the WTO in a national communication titled "Measures Adopted during the COVID-19 Pandemic with Implications for the Agricultural Sector". [3]

[1] World Trade Organization. 2020. "COVID-19: Measures affecting trade in goods". [https://www.wto.org/english/tratop_e/covid19_e/trade_related_goods_measure_e.htm]. Accessed 31 January 2021.
[2] Bloomberg Law. 2020. "International Trade Covid-19 Developments". [https://www.bloomberglaw.com/product/health/document/XDL12EUG000000#St.%20Vincent]. Accessed 31 January 2021.
[3] World Trade Organization. 2020. "Communication of El Salvador - Measures Adopted during the COVID-19 Pandemic with Implications for the Agricultural Sector". [https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=S:/G/AG/GEN163.pdf]. Accessed 17 February 2021.

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 public evidence that El Salvador, in the past year, has implemented a ban, without international/bilateral support, on travelers arriving from a specific country or countries due to an infectious disease outbreak. On March 11, 2020, the President of El Salvador issued Decree No. 13 on actions to prevent the entry and spread of COVID-19 in the country. [1] Article 4 declared that the National Directorate of Migration and Foreigners would prohibit the entry of all foreigners to El Salvador, except for residents and diplomats. [1]

[1] Presidency of the Republic (Presidencia de la Republica). 2020. "Decree No. 13 of 2020". [https://www.transparencia.gob.sv/institutions/minec/documents/372543/download]. Accessed 17 February 2021.

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: 156.62

2016

WHO; national sources

4.1.1b

Nurses and midwives per 100,000 people

Input number

Current Year Score: 183.44

2018

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: 1

There is public evidence that El Salvador has 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. In 2014, the Ministry of Health (MINSAL) issued the National Policy for Development of Human Resources in Health. [1] The policy addresses shortages in priority specialty areas. It outlines strategies to address shortages, including establishing a National System of Health Specialties coordinated by an inter-sectoral body, coordination processes with universities, the creation of national-level specialized medical training, and a monitoring system for the training of specialists adapted to the needs of the national health system. The policy also addresses gaps in regulations governing training processes, accreditation and certification (and re-certification) for healthcare workers. [1] In 2018, MINSAL issued the Directives for the Use of the Planning Module for Doctors and Nurses in MINSAL's National Hospitals. The Directives link the overarching National Policy with hospital-level practices in human resources for health planning. [2] In 2019, MINSAL's Inter-Sectoral Human Resources Commission issued an updated implementation plan for the 2014 National Policy, the 2019-2023 Management and Development Plan for Human Talent in Healthcare in El Salvador. The Plan's actions include updating the National Policy's identification of human resource needs and implementing new education and training programs, as well as opening up new positions, to fill gaps identified during the planning process. [3]

[1] Ministry of Health (Ministerio de Salud). 2014. "National Policy for Development of Human Resources in Health". [https://rrhh.salud.gob.sv/files/webfiles/politicas/politica_nacional_desarrollo_rrhh_v2.pdf]. Accessed 17 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2018. "Directives for the Use of the Planning Module for Doctors and Nurses in MINSAL's National Hospitals". [https://rrhh.salud.gob.sv/files/webfiles/otros_documentos/directricesplanificaciontalentohumanohospitales.pdf]. Accessed 17 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2019. "2019-2023 Management and Development Plan for Human Talent in Healthcare in El Salvador". [https://rrhh.salud.gob.sv/files/webfiles/planes/plandesarrollodetchcirhelsalvador20192023.pdf].

Accessed 17 February 2021.

4.1.2 Facilities capacity

4.1.2a

Hospital beds per 100,000 people

Input number

Current Year Score: 120

2017

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: 0

There is insufficient public evidence that El Salvador has 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. The Ministry of Health's (MINSAL) 2019 Manual for Standard Precautions and Patient Isolation mentions that negative air pressure is recommended for patient isolation in some situations, but does not state which, if any, facilities in the country have such capabilities. [1] Similarly, MINSAL's 2020 Technical Guidelines for Comprehensive care for Persons with COVID-19 also recommend negative air pressure for patient isolation, but do not list any facilities with that capability. [2] The websites of the public Rosales National Hospital and the private Diagnostic Hospital do not contain any public information on biocontainment patient isolation units. [3, 4] The websites of the Ministry of Health and National Institute of Health do not contain additional public information regarding 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. [5, 6]

[1] Ministry of Health (Ministerio de Salud). 2019. "Manual for Standard Precautions and Patient Isolation". [http://asp.salud.gob.sv/regulacion/pdf/manual/manualprecaucionesestandaresaislamientopacientes2019.pdf]. Accessed 17 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2020. "Technical Guidelines for Comprehensive care for Persons with COVID-19". [https://www.transparencia.gob.sv/institutions/minsal/documents/371717/download]. Accessed 17 February 2021.
[3] Hospital Nacional Rosales. 2021. [http://www.hnr.gob.sv/]. Accessed 17 February 2021.
[4] Hospital de Diagnostico. 2021. [http://www.hospitaldiagnostico.com/]. Accessed 17 February 2021.
[5] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[6] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 17 February 2021.

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: 0

There is no public evidence that El Salvador has, in the past two years, demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak or developed, updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak.

The Ministry of Health's (MINSAL) 2017 Emergency and Multi-Threat Disaster Response Plan was previously used by El Salvador for outbreaks of dengue, Zika, AH1N1 Influenza (where it deployed rapid response teams) and chikungunya. The Plan does not include actions to expand isolation capacity. [1] MINSAL's 2019 Manual for Standard Precautions and Patient Isolation mentions that negative air pressure is recommended for patient isolation in some situations, but does not state which, if any, facilities in the country have such capabilities or include a plan to expand capacity. [4] The websites of the MINSAL and the General Directorate of Civil Protection, Prevention and Disaster Mitigation do not contain additional information regarding if El Salvador has, in the past two years, demonstrated capacity to expand isolation capacity in response to an infectious disease outbreak or developed, updated or tested a plan to expand isolation capacity in response to an infectious disease outbreak. [2, 3] MINSAL's 2020 Technical Guidelines for Comprehensive care for Persons with COVID-19 also recommend negative air pressure for patient isolation, but do not list any facilities with that capability or a plan to expand capacity. [5]

[1] Ministry of Health (Ministerio de Salud). May 2017. "Emergency and Multi-Threat Disaster Response Plan" ("Plan de respuesta a emergencias y desastres con enfoque multiamenazas del Ministerio de Salud"). [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_de_respuesta_a_emergencia_y_desastres_enfoque_multiamenazas_v1.pdf]. Accessed 14 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[3] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil, Prevencion y Mitigación de Desastres). 2021. "Home". [http://proteccioncivil.gob.sv/]. Accessed 15 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2019. "Manual for Standard Precautions and Patient Isolation". [http://asp.salud.gob.sv/regulacion/pdf/manual/manualprecaucionesestandaresaislamientopacientes2019.pdf]. Accessed 17 February 2021.
[5] Ministry of Health (Ministerio de Salud). 2020. "Technical Guidelines for Comprehensive care for Persons with COVID-19". [https://www.transparencia.gob.sv/institutions/minsal/documents/371717/download]. Accessed 17 February 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

There is public evidence that El Salvador has a national procurement protocol in place which can be utilized by the Ministries of Health and Agriculture for the acquisition of laboratory supplies (such as equipment, reagents and media) and medical supplies (equipment, PPE) for routine needs.

Legislative Decree No. 868 of 2000, the Public Administration Procurement and Contracting Law, established the requirements for public procurement in the country. [1] Ministries manage their procurement needs via COMPRASAL, an electronic system of acquisitions. The Ministry of Health (MINSAL) and Ministry of Agriculture and Ranching (MAG) use COMPRASAL for the acquisition of laboratory and medical supplies. [2] For example, MINSAL has used the system to procure laboratory reagents and PPE such as latex gloves. [3, 4] MAG has used the system to procure medical supplies for its veterinary services, as well as maintenance for its laboratory equipment. [5, 6]

[1] Legislative Assembly (Asamblea Legislativa). 2000. "Legislative Decree No. 868 of 2000 Public Administration Procurement and Contracting Law". [https://www.transparencia.gob.sv/institutions/alc-san-luis-herra/documents/310005/download]. Accessed 17 February 2021.
[2] Ministry of the Treasury (Ministerio de Hacienda). 2021. "COMPRASAL". [https://www.comprasal.gob.sv/comprasal_web/]. Accessed 17 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2018. "No. 14/2018". [https://www.salud.gob.sv/archivos/pdf/uaci2018/licitaciones_abiertas/LAbierta-ADACA-UE142018/LA-ADACA-UE142018_BASES-sig.pdf]. Accessed 17 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2019. "LP No. 02/2019". [https://www.salud.gob.sv/archivos/pdf/uaci2019/licitaciones_publicas/LP022019/LP022019-BASES-sig.pdf]. Accessed 17 February 2021.
[5] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2013. "MAG-No. 006/2013". [https://www.transparencia.gob.sv/institutions/43/documents/53784/download]. Accessed 17 February 2021.
[6] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2019. "LG No. 052/2019-MAG". [https://www.transparencia.gob.sv/institutions/mag/contracts/94174]. Accessed 17 February 2021.

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: 0

There is no public evidence that El Salvador has a stockpile of medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) for national use during a public health emergency.

In 2007, the Ministry of Health (MINSAL) published the Technical Guide and List of Medical Supplies for a Health Emergency, which describes inventory management and minimal information on distribution, but does not contain information regarding a stockpile of medical supplies. The Guide contains a list of essential medicines for a health emergency. [1] In 2014, MINSAL published the Contingency Plan for the Preservation of Human Vaccines in the Event of Emergencies and Disasters. The Plan discusses options for preserving vaccines in an emergency situation but does not mention an MCM stockpile or central storage location. [8] The websites of the Ministry of Health, Ministry of National Defense, Ministry of Governance, General

Directorate of Civil Protection, Prevention and Disaster Mitigation, National Directorate of Medicines, and National Institute of Health do not contain additional public information regarding a stockpile of medical supplies. [2, 3, 4, 5, 6, 7]

[1] Ministry of Health (Ministerio de Salud). 2007. "Technical Guide and List of Medical Supplies for a Health Emergency". [http://asp.salud.gob.sv/regulacion/pdf/guia/Guia_suministros_medicos_emergencia_sanitaria.pdf]. Accessed 17 February 2021.
[2] Ministry of Governance (Ministerio de Gobernacion). 2021. "Reports". [https://www.gobernacion.gob.sv/?sdm_categories=informes]. Accessed 16 February 2021.
[3] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. "Fuerza Armada de El Salvador". [https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[5] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil, Prevencion y Mitigación de Desastres). 2021. "Home". [http://proteccioncivil.gob.sv/]. Accessed 16 February 2021.
[6] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 17 February 2021.
[7] National Directorate of Medicines (Dirección Nacional de Medicamentos). 2021. "DNM". [https://www.medicamentos.gob.sv/index.php/es/]. Accessed 10 February 2021.
[8] Ministry of Health (Ministerio de Salud). 2014. "Contingency Plan for the Preservation of Human Vaccines in the Event of Emergencies and Disasters". [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_contingencia_conservacion_vacunas_humanas_en_caso_de_emergencias.pdf]. Accessed 17 February 2021.

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 no public evidence that El Salvador has a stockpile of laboratory supplies (e.g. reagents, media) for national use during a public health emergency. In 2007 the Ministry of Health (MINSAL) published the Technical Guide and List of Medical Supplies for a Health Emergency, which describes inventory management and minimal information on distribution, but does not contain information regarding a stockpile of laboratory supplies. [1] The websites of the Ministry of Health, Ministry of National Defense, Ministry of Governance, General Directorate of Civil Protection, Prevention and Disaster Mitigation, National Directorate of Medicines, and National Institute of Health do not contain additional public information regarding a stockpile of laboratory supplies. [2, 3, 4, 5, 6, 7]

[1] Ministry of Health (Ministerio de Salud). 2007. "Technical Guide and List of Medical Supplies for a Health Emergency". [http://asp.salud.gob.sv/regulacion/pdf/guia/Guia_suministros_medicos_emergencia_sanitaria.pdf]. Accessed 17 February 2021.
[2] Ministry of Governance (Ministerio de Gobernacion). 2021. "Reports". [https://www.gobernacion.gob.sv/?sdm_categories=informes]. Accessed 16 February 2021.
[3] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. "Fuerza Armada de El Salvador". [https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[5] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil, Prevencion y Mitigación de Desastres). 2021. "Home". [http://proteccioncivil.gob.sv/]. Accessed 16 February 2021.

[6] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 17 February 2021.
[7] National Directorate of Medicines (Dirección Nacional de Medicamentos). 2021. "DNM". [https://www.medicamentos.gob.sv/index.php/es/]. Accessed 10 February 2021.

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 no public evidence that the government of El Salvador conducts or requires an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency. There is no public evidence that El Salvador has a stockpile of medical and laboratory supplies.

In 2007, the Ministry of Health (MINSAL) published the Technical Guide and List of Medical Supplies for a Health Emergency, which describes inventory management and minimal information on distribution, but does not contain information regarding a stockpile of medical supplies. The Guide contains a list of essential medicines for a health emergency. [1] In 2014, MINSAL published the Contingency Plan for the Preservation of Human Vaccines in the Event of Emergencies and Disasters. The Plan discusses options for preserving vaccines in an emergency situation but does not mention an MCM stockpile or central storage location. [2] The websites of the Ministry of Health, Ministry of National Defense, Ministry of Governance, General Directorate of Civil Protection, Prevention and Disaster Mitigation, National Directorate of Medicines, and National Institute of Health do not contain additional public information regarding an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency. [3, 4, 5, 6, 7, 8]

[1] Ministry of Health (Ministerio de Salud). 2007. "Technical Guide and List of Medical Supplies for a Health Emergency". [http://asp.salud.gob.sv/regulacion/pdf/guia/Guia_suministros_medicos_emergencia_sanitaria.pdf]. Accessed 17 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2014. "Contingency Plan for the Preservation of Human Vaccines in the Event of Emergencies and Disasters". [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_contingencia_conservacion_vacunas_humanas_en_caso_de_emergencias.pdf]. Accessed 17 February 2021.
[3] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. "Fuerza Armada de El Salvador". [https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[5] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil, Prevencion y Mitigación de Desastres). 2021. "Home". [http://proteccioncivil.gob.sv/]. Accessed 16 February 2021.
[6] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 17 February 2021.
[7] National Directorate of Medicines (Dirección Nacional de Medicamentos). 2021. "DNM". [https://www.medicamentos.gob.sv/index.php/es/]. Accessed 10 February 2021.
[8] Ministry of Governance (Ministerio de Gobernacion). 2021. "Reports". [https://www.gobernacion.gob.sv/?sdm_categories=informes]. Accessed 16 February 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: 0

There is no public evidence that El Salvador has a plan/agreement to leverage domestic manufacturing capacity to produce medical supplies (e.g. MCMs, medicines, vaccines, equipment, PPE) or a plan/mechanism to procure medical supplies for national use during a public health emergency.

In 2007 the Ministry of Health (MINSAL) published the Technical Guide and List of Medical Supplies for a Health Emergency, which describes inventory management and minimal information on distribution, but does not contain information regarding domestic manufacturing or mechanisms to procure medical supplies. The Guide discusses receiving donations but does not describe specific arrangements. [1] MINSAL's 2017 Emergency and Multi-Threat Disaster Response Plan does not contain information regarding domestic manufacturing or mechanisms to procure medical supplies. The Plan's two mentions of supplies are that the Vice-Minister of Healthcare Services should "determine the needs for resources and supplies at healthcare facilities" and that the General Manager of Operations should "coordinate with warehouses the distribution of supplies and medicines". Additional details are not provided. [2] The websites of the Ministry of Health, Ministry of National Defense, Ministry of Governance, General Directorate of Civil Protection, Prevention and Disaster Mitigation, National Directorate of Medicines, and National Institute of Health do not contain additional public information regarding a plan/agreement/mechanism to leverage domestic manufacturing capacity or to procure medical supplies for national use during a public health emergency. [3, 4, 5, 6, 7, 8] MINSAL's 2014 Ebola Virus Contingency Plan states that "Plan B" for PPE provision should rely on "artisanal" or homemade options in the event of shortages. [9] El Salvador's 2019 International Health Regulations (IHR) State Party self-assessment annual report scored the country at 100% for indicator "C8.3 Emergency resource mobilization". [10]

[1] Ministry of Health (Ministerio de Salud). 2007. "Technical Guide and List of Medical Supplies for a Health Emergency". [http://asp.salud.gob.sv/regulacion/pdf/guia/Guia_suministros_medicos_emergencia_sanitaria.pdf]. Accessed 17 February 2021.
[2] Ministry of Health (Ministerio de Salud). May 2017. "Emergency and Multi-Threat Disaster Response Plan" ("Plan de respuesta a emergencias y desastres con enfoque multiamenazas del Ministerio de Salud"). [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_de_respuesta_a_emergencia_y_desastres_enfoque_multiamenazas_v1.pdf]. Accessed 16 February 2021.
[3] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. "Fuerza Armada de El Salvador". [https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[5] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil, Prevencion y Mitigación de Desastres). 2021. "Home". [http://proteccioncivil.gob.sv/]. Accessed 16 February 2021.
[6] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 17 February 2021.
[7] National Directorate of Medicines (Dirección Nacional de Medicamentos). 2021. "DNM". [https://www.medicamentos.gob.sv/index.php/es/]. Accessed 10 February 2021.

[8] Ministry of Governance (Ministerio de Gobernacion). 2021. “Reports”. [https://www.gobernacion.gob.sv/?sdm_categories=informes]. Accessed 16 February 2021.
[9] Ministry of Health (Ministerio de Salud). 2014. “Ebola Virus Contingency Plan”. [https://www.salud.gob.sv/archivos/pdf/promocion_salud/material_educativo/campana_Ebola/Plan_de_Contingencia_Virus_Ebola.pdf]. Accessed 15 February 2021.
[10] World Health Organization. 2019. “IHR Score per capacity - El Salvador”. [https://extranet.who.int/e-spar/]. Accessed 11 February 2021.

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 no public evidence that El Salvador has a plan/agreement to leverage domestic manufacturing capacity to produce laboratory supplies (e.g. reagents, media) or a plan/mechanism to procure laboratory supplies for national use during a public health emergency. In 2007 the Ministry of Health (MINSAL) published the Technical Guide and List of Medical Supplies for a Health Emergency, which describes inventory management and minimal information on distribution, but does not contain information regarding domestic manufacturing or mechanisms to procure laboratory supplies. The Guide discusses receiving donations but does not describe specific arrangements. [1] MINSAL’s 2017 Emergency and Multi-Threat Disaster Response Plan does not contain information regarding domestic manufacturing or mechanisms to procure laboratory supplies. The Plan’s two mentions of supplies are that the Vice-Minister of Healthcare Services should “determine the needs for resources and supplies at healthcare facilities” and that the General Manager of Operations should “coordinate with warehouses the distribution of supplies and medicines”. Additional details are not provided. [2] The websites of the Ministry of Health, Ministry of National Defense, Ministry of Governance, General Directorate of Civil Protection, Prevention and Disaster Mitigation, National Directorate of Medicines, and National Institute of Health do not contain additional public information regarding a plan/agreement/mechanism to leverage domestic manufacturing capacity or to procure laboratory supplies for national use during a public health emergency. [3, 4, 5, 6, 7, 8]

[1] Ministry of Health (Ministerio de Salud). 2007. “Technical Guide and List of Medical Supplies for a Health Emergency”. [http://asp.salud.gob.sv/regulacion/pdf/guia/Guia_suministros_medicos_emergencia_sanitaria.pdf]. Accessed 17 February 2021.
[2] Ministry of Health (Ministerio de Salud). May 2017. “Emergency and Multi-Threat Disaster Response Plan” ("Plan de respuesta a emergencias y desastres con enfoque multiamenazas del Ministerio de Salud"). [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_de_respuesta_a_emergencia_y_desastres_enfoque_multiamenazas_v1.pdf]. Accessed 16 February 2021.
[3] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. “Fuerza Armada de El Salvador”. [https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2021. “MINSAL”. [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[5] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil, Prevencion y Mitigación de Desastres). 2021. “Home”. [http://proteccioncivil.gob.sv/]. Accessed 16 February 2021.
[6] National Institute of Health (Instituto Nacional de Salud). 2021. “INS”. [http://ins.salud.gob.sv/]. Accessed 17 February 2021.

[7] National Directorate of Medicines (Dirección Nacional de Medicamentos). 2021. “DNM”. [https://www.medicamentos.gob.sv/index.php/es/]. Accessed 10 February 2021.
[8] Ministry of Governance (Ministerio de Gobernacion). 2021. “Reports”. [https://www.gobernacion.gob.sv/?sdm_categories=informes]. Accessed 16 February 2021.

4.3 MEDICAL COUNTERMEASURES AND PERSONNEL DEPLOYMENT

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

4.3.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that El Salvador has 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). In 2007 the Ministry of Health (MINSAL) published the Technical Guide and List of Medical Supplies for a Health Emergency, which describes inventory management and minimal information on distribution, but does not contain information regarding dispensing MCMs. [1] MINSAL's 2017 Emergency and Multi-Threat Disaster Response Plan does not contain information regarding dispensing MCMs. [2] In 2014, MINSAL published the Contingency Plan for the Preservation of Human Vaccines in the Event of Emergencies and Disasters. The Plan discusses options for preserving vaccines in an emergency situation but does not mention dispensing MCMs. [3] The websites of the Ministry of Health, Ministry of National Defense, Ministry of Governance, General Directorate of Civil Protection, Prevention and Disaster Mitigation, National Directorate of Medicines, and National Institute of Health do not contain additional public information regarding a plan, program, or guidelines in place for dispensing MCM for national use during a public health emergency. [4, 5, 6, 7, 8, 9]

[1] Ministry of Health (Ministerio de Salud). 2007. "Technical Guide and List of Medical Supplies for a Health Emergency". [http://asp.salud.gob.sv/regulacion/pdf/guia/Guia_suministros_medicos_emergencia_sanitaria.pdf]. Accessed 17 February 2021.
[2] Ministry of Health (Ministerio de Salud). May 2017. "Emergency and Multi-Threat Disaster Response Plan" ("Plan de respuesta a emergencias y desastres con enfoque multiamenazas del Ministerio de Salud"). [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_de_respuesta_a_emergencia_y_desastres_enfoque_multiamenazas_v1.pdf]. Accessed 16 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2014. "Contingency Plan for the Preservation of Human Vaccines in the Event of Emergencies and Disasters". [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_contingencia_conservacion_vacunas_humanas_en_caso_de_emergencias.pdf]. Accessed 17 February 2021.
[4] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[5] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil, Prevencion y Mitigación de Desastres). 2021. "Home". [http://proteccioncivil.gob.sv/]. Accessed 16 February 2021.
[6] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 17 February 2021.
[7] National Directorate of Medicines (Dirección Nacional de Medicamentos). 2021. "DNM". [https://www.medicamentos.gob.sv/index.php/es/]. Accessed 10 February 2021.

[8] Ministry of Governance (Ministerio de Gobernacion). 2021. "Reports".
[https://www.gobernacion.gob.sv/?sdm_categories=informes]. Accessed 16 February 2021.
[9] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. "Fuerza Armada de El Salvador".
[https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.

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 public evidence that El Salvador has a public plan in place to receive health personnel from other countries to respond to a public health emergency. The Ministry of Health's (MINSAL) 2017 Emergency and Multi-Threat Disaster Response Plan does not contain information regarding receiving health personnel from other countries. [1] In 2014, the Ministry of External Relations, issued the Manual for the Management and Coordination of International Humanitarian Assistance in Cases of Disasters. The Manual states that the General Directorate of Civil Protection is responsible for compiling a Country Needs List (LNP) to respond to emergencies. The Ministry reaches out to foreign partners based on the LNP. According to the Manual, if the LNP "includes medical, paramedic, search and rescue, or other specialized personnel, the responsibilities of this Ministry end when the specialists arrive in the country". [2] In practice MINSAL has been responsible for the logistics of in-country operations of health personnel from other countries. In terms of licensing, medical profession Oversight Boards must issue temporary or provisional licenses to foreign medical personnel according to the 1988 Health Code, Article 32. [3, 4] In 2019, a group of Cuban doctors performing eye surgeries had to leave El Salvador after the relevant Oversight Board denied them retroactive licensing because MINSAL failed to present proper documentation for the doctors. [5, 6] In 2014, the Pan American Health Organization's Board of Directors issued an Action Plan for Coordinating Humanitarian Assistance in the Americas. Paragraph 2(c) called on national authorities to create flexible registration mechanisms for "international and multidisciplinary medical teams" for immediate response to emergency situations. [7] The websites of the Ministry of Health, Ministry of National Defense, Ministry of Governance, General Directorate of Civil Protection, Prevention and Disaster Mitigation, National Directorate of Medicines, and National Institute of Health do not contain additional public information regarding a public plan in place to receive health personnel from other countries to respond to a public health emergency. [8, 9, 10, 11, 12]

[1] Ministry of Health (Ministerio de Salud). May 2017. "Emergency and Multi-Threat Disaster Response Plan" ("Plan de respuesta a emergencias y desastres con enfoque multiamenazas del Ministerio de Salud").
[http://asp.salud.gob.sv/regulacion/pdf/planes/plan_de_respuesta_a_emergencia_y_desastres_enfoque_multiamenazas_v1.pdf]. Accessed 16 February 2021.
[2] Ministry of Exterior Relations (Ministerio de Relaciones Exteriores). 2014. "Manual for the Management and Coordination of International Humanitarian Assistance in Cases of Disasters". [https://rree.gob.sv/wp-content/uploads/2019/12/Manual-Canciller%C3%ADa-Gestion-y-Coordinaci%C3%B3n-de-AHI-.pdf]. Accessed 17 February 2021.
[3] Legislative Assembly (Asamblea Legislativa). 1988. "Health Code (Decree No. 955 of 1988)".
[https://www.vertic.org/media/National%20Legislation/El_Salvador/SV_Codigo_de_Salud.pdf]. Accessed 15 February 2021.
[4] Superior Council of Public Health (Consejo Superior de Salud Pública). 2021. "Oversight Board for the Medical Profession".
[http://cssp.gob.sv/junta-de-vigilancia-de-la-profesion-medica/]. Accessed 17 February 2021.
[5] Ministry of Health (Ministerio de Salud). 2019. "Enough of the mistreatment of the humanitarian efforts of the Cuban medical mission in the National Ophthalmological Center". [https://www.salud.gob.sv/15-04-2019-basta-de-maltrato-a-la-

labor-humanitaria-de-la-mision-medica-cubana-en-el-centro-oftalmologico-nacional/]. Accessed 17 February 2021.
[6] Diario Las Americas. 2019. “Cuba withdraws medical mission from El Salvador after denial of licenses”. [https://www.diariolasamericas.com/america-latina/cuba-retira-mision-medicos-el-salvador-negacion-permisos-n4176181]. Accessed 17 February 2021.
[7] Pan American Health Organisation. 3 October 2014. "Plan of Action for the Coordination of Humanitarian Assistance" ("Plan de accion para coordinar la asistencia humanitaria"). [http://iris.paho.org/xmlui/bitstream/handle/123456789/7647/CD53-R9-s.pdf]. Accessed 17 February 2021.
[8] Ministry of Governance (Ministerio de Gobernacion). 2021. “Reports”. [https://www.gobernacion.gob.sv/?sdm_categories=informes]. Accessed 16 February 2021.
[9] Ministry of National Defense (Ministerio de Defensa Nacional). 2021. “Fuerza Armada de El Salvador”. [https://www.fuerzaarmada.mil.sv/]. Accessed 11 February 2021.
[10] Ministry of Health (Ministerio de Salud). 2021. “MINSAL”. [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[11] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil, Prevencion y Mitigación de Desastres). 2021. “Home”. [http://proteccioncivil.gob.sv/]. Accessed 16 February 2021.
[12] National Institute of Health (Instituto Nacional de Salud). 2021. “INS”. [http://ins.salud.gob.sv/]. Accessed 17 February 2021.

4.4 HEALTHCARE ACCESS

4.4.1 Access to healthcare

4.4.1a

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

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

Current Year Score: 3

2020

World Policy Analysis Center

4.4.1b

Access to skilled birth attendants (% of population)

Input number

Current Year Score: 99.9

2016

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: 170.14

2017

WHO Global Health Expenditure database

4.4.2 Paid medical leave

4.4.2a

Are workers guaranteed paid sick leave?

Paid sick leave = 2, Unpaid sick leave = 1, No sick leave = 0

Current Year Score: 2

2020

World Policy Analysis Center

4.4.3 Healthcare worker access to healthcare

4.4.3a

Has the government issued legislation, a policy, or a public statement committing to provide prioritized healthcare services to healthcare workers who become sick as a result of responding to a public health emergency?

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that El Salvador has 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. The Ministry of Health's (MINSAL) 2017 Emergency and Multi-Threat Disaster Response Plan does not contain information regarding prioritized healthcare services for healthcare workers. [1] MINSAL's 2012 Technical Guidelines for the Categorization and Provision of Hospital Services do not mention prioritized healthcare services for healthcare workers. [2] MINSAL's 2016 Implementation Plan for the National Nursing Care Policy does not mention prioritized healthcare services for healthcare workers. [3] The Salvadorian Institute of Social Security's 2020 Technical Guidelines for Handling Palliative Care during the COVID-19 Pandemic do not mention prioritized healthcare services for healthcare workers. [4] The websites of the Ministry of Health, General Directorate of Civil Protection, Prevention and Disaster Mitigation, and National Institute of Health do not contain additional public information regarding prioritized healthcare services to healthcare workers who become sick as a result of responding to a public health emergency. [5, 6, 7]

[1] Ministry of Health (Ministerio de Salud). May 2017. "Emergency and Multi-Threat Disaster Response Plan" ("Plan de respuesta a emergencias y desastres con enfoque multiamenazas del Ministerio de Salud"). [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_de_respuesta_a_emergencia_y_desastres_enfoque_multiamenazas_v1.pdf]. Accessed 16 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2012. "Technical Guidelines for the Categorization and Provision of Hospital Services". [http://asp.salud.gob.sv/regulacion/pdf/lineamientos/lineamientos_categorizacion.pdf]. Accessed 17 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2016. "Implementation Plan for the National Nursing Care Policy".

[http://asp.salud.gob.sv/regulacion/pdf/planes/plan_implementacion_politica_enfermeria.pdf]. Accessed 17 February 2021.
[4] Salvadorian Institute of Social Security (Instituto Salvadoreño del Seguro Social). 2020. "Technical Guidelines for Handling Palliative Care during the COVID-19 Pandemic".
[http://aps.isss.gob.sv/Documents/Gu%C3%ADas,%20normas,%20manuales,%20pol%C3%ADticas/Lineamientos/LINEAMIENTOS%20CUIDADOS%20PALIATIVOS%20DURANTE%20PANDEMIA%20COVID-19%20ISSS.pdf]. Accessed 17 February 2021.
[5] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[6] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil, Prevencion y Mitigación de Desastres). 2021. "Home". [http://proteccioncivil.gob.sv/]. Accessed 16 February 2021.
[7] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 17 February 2021.

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 public evidence that El Salvador has a system in place for public health officials and healthcare workers to communicate during a public health emergency. The Ministry of Health's (MINSAL) 2017 Emergency and Multi-Threat Disaster Response Plan tasks regional Health Emergency Operations Centers (COE) with "collecting data and producing information" but does not specify how communication with teams in the field shall occur during an emergency. [1] Documentation regarding MINSAL's Rapid Response Teams (ERR) state that the national-level ERR has a member that is a communications technician. Further, the Situation Room that is activated when an outbreak is discovered "shall activate the communications plan with its respective teams in order to share the activities to be carried out". The ERR's logistics team is supposed to make sure "communications equipment" is available, but no additional details are provided. [2, 3] The websites of the Ministry of Health, General Directorate of Civil Protection, Prevention and Disaster Mitigation, and National Institute of Health do not contain additional public information regarding a system in place for public health officials and healthcare workers to communicate during a public health emergency. [4, 5, 6]

[1] Ministry of Health (Ministerio de Salud). May 2017. "Emergency and Multi-Threat Disaster Response Plan" ("Plan de respuesta a emergencias y desastres con enfoque multiamenazas del Ministerio de Salud").
[http://asp.salud.gob.sv/regulacion/pdf/planes/plan_de_respuesta_a_emergencia_y_desastres_enfoque_multiamenazas_v1.pdf]. Accessed 16 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2018. "Preparation of Rapid Response Teams for the Regional Measles Epidemiological Situation".
[https://www.salud.gob.sv/archivos/pdf/telesalud_2018_presentaciones/presentaciones08022018/PREPARACION-DE-LOS-EQUIPOS-DE-RESPUESTA-RAPIDA-SITUACION-EPIDEMIOLOGICA-REGIONAL-SARAMPION.pdf]. Accessed 17 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2018. "Technical Guidelines for the Implementation of Rapid Response Interventions for an Outbreak of Measles and Rubella".
[https://www.transparencia.gob.sv/institutions/minsal/documents/234144/download]. Accessed 15 February 2021.
[4] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 17 February

2021.
[5] Ministry of Health (Ministerio de Salud). 2021. “MINSAL”. [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[6] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil, Prevencion y Mitigación de Desastres). 2021. “Home”. [http://proteccioncivil.gob.sv/]. Accessed 16 February 2021.

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 no public evidence that El Salvador has a system in place for public health officials and healthcare workers to communicate during a public health emergency that encompasses healthcare workers in both the public and private sector.

The Ministry of Health’s (MINSAL) 2017 Emergency and Multi-Threat Disaster Response Plan tasks regional Health Emergency Operations Centers (COE) with “collecting data and production information” but does not specify how communication with teams in the field shall occur during an emergency or that private sector healthcare workers are included. [1] Documentation regarding MINSAL’s Rapid Response Teams (ERR) does not mention communication with private sector healthcare workers. [2, 3] The websites of the Ministry of Health, General Directorate of Civil Protection, Prevention and Disaster Mitigation, and National Institute of Health do not contain additional public information regarding a system in place for public health officials and healthcare workers to communicate during a public health emergency that encompasses healthcare workers in both the public and private sector. [4, 5, 6]

[1] Ministry of Health (Ministerio de Salud). May 2017. “Emergency and Multi-Threat Disaster Response Plan” ("Plan de respuesta a emergencias y desastres con enfoque multiamenazas del Ministerio de Salud"). [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_de_respuesta_a_emergencia_y_desastres_enfoque_multiamenazas_v1.pdf]. Accessed 16 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2018. “Preparation of Rapid Response Teams for the Regional Measles Epidemiological Situation”. [https://www.salud.gob.sv/archivos/pdf/telesalud_2018_presentaciones/presentaciones08022018/PREPARACION-DE-LOS-EQUIPOS-DE-RESPUESTA-RAPIDA-SITUACION-EPIDEMIOLOGICA-REGIONAL-SARAMPION.pdf]. Accessed 17 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2018. “Technical Guidelines for the Implementation of Rapid Response Interventions for an Outbreak of Measles and Rubella”. [https://www.transparencia.gob.sv/institutions/minsal/documents/234144/download]. Accessed 15 February 2021.
[4] National Institute of Health (Instituto Nacional de Salud). 2021. “INS”. [http://ins.salud.gob.sv/]. Accessed 17 February 2021.
[5] Ministry of Health (Ministerio de Salud). 2021. “MINSAL”. [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[6] General Directorate of Civil Protection, Prevention and Disaster Mitigation (Dirección General de Protección Civil, Prevencion y Mitigación de Desastres). 2021. “Home”. [http://proteccioncivil.gob.sv/]. Accessed 16 February 2021.

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 public evidence that El Salvador's national public health system is monitoring for and tracking the number of healthcare associated infections (HCAI) that take place in healthcare facilities.

30 hospitals across the country form part of the Ministry of Health's (MINSAL) public hospital system and each hospital has its own committee on infections, which is tasked with daily data collection and analysis on HCAIs and reporting it back to the ministry. Surveillance is coordinated with the Directorate of Infectious Diseases. The infections tracked include surgical site infections (SSI) in post-C-sections, post-birth endometritis, appendectomies, infection of urinary tracts by catheter, infections by vascular catheter, osteosynthesis, and cholecystectomies, as well as non SSI-related pneumonia by respirators, neonatal sepsis and omphalitis, among others. [1] The Directorate's HCAI Unit is directly tasked with "advising, monitoring and researching at the regional level". [2] A 2019 study that examined data from 10 hospitals from 2010-2017 found that 60% of cultures tested for HCAI-related bacteria came back positive. [3]

[1] Ministry of Health (Ministerio de Salud). 26 July 2014. "Epidemiological Bulletin - Week 30" ("Boletin Epidemiologico - Semana 30").
[https://www.salud.gob.sv/archivos/vigi_epide2014/boletines_epidemilogicos2014/Boletin_epidemiologico_SE30.pdf]. Accessed 17 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2012. "Manual of Organization for the Directorate of Infectious Diseases. [https://www.transparencia.gob.sv/institutions/minsal/documents/13534/download]. Accessed 17 February 2021.
[3] Franco, Victor David. 2019. "Bacterial flora in hospitals of the Salvadorian Institute of Social Security". [https://alerta.salud.gob.sv/flora-bacteriana-en-hospitales-del-instituto-salvadoreno-del-seguro-social-2010-2017/]. Accessed 17 February 2021.

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 public evidence that El Salvador has a national requirement for ethical review (e.g., from an ethics committee or via Institutional Review Board approval) before beginning a clinical trial. El Salvador's National Ethics Committee for Health Research (CNEIS) is tasked with authorizing each clinical trial that takes place in the country. [1] The CNEIS was founded in 2005 by the Superior Council for Public Health and the Ministry of Health (MINSAL) and operates as an independent and autonomous public body comprised of multidisciplinary competent technical experts. [2] Clinical trials deemed "without risk" are reviewed by local ethics committees across the country; clinical trials deemed "of minimal risk" and "larger risk" are reviewed by the CNEIS. [3] The requirement for ethical review was established in the regulatory document governing CNEIS' founding, the Ministry of Health's 2017 National Policy on Health Research from 2017, and in Articles 66 and 74 of the Law on Medicines, which requires approval by the CNEIS if any medicine is used in clinical trials.

[1] National Ethics Committee for Health Research (Comité Nacional de Ética de la Investigación en la Salud). 2021. "Clinical Trials" (Estudios Clínicos"). [http://www.cneis.org.sv/estudios-clinicos/]. Accessed 17 February 2021.
[2] National Ethics Committee for Health Research (Comité Nacional de Ética de la Investigación en la Salud). 2021. "CNEIS". [https://www.cneis.org.sv/cneis/]. Accessed 17 February 2021.
[3] National Ethics Committee for Health Research (Comité Nacional de Ética de la Investigación en la Salud). 2015. "Standard Procedures Manual of the National Ethics Committee for Health Research" ("Manual de Procedimientos Estándar del Comité Nacional de Ética de la Investigación en Salud"). [http://www.cneis.org.sv/wp-content/uploads/2018/07/manual_CNEIS.pdf]. Accessed 17 February 2021.
[4] National Institute of Health (Instituto Nacional de Salud). 2017. "National Policy on Health Research" ("Politica Nacional de Investigacion en Salud"). [http://ins.salud.gob.sv/wp-content/uploads/2017/11/Poli%CC%81tica_Nacional_de_Investigaciones.pdf]. Accessed 17 February 2021.
[5] National Ethics Committee for Health Research (Comité Nacional de Ética de la Investigación en la Salud). 2017. "National Ethics Committee for Health Research" ("Comité Nacional de Ética de la Investigación en la Salud"). [http://www.cneis.org.sv/wp-content/uploads/2017/10/Procedimientos-CNEIS.pdf]. Accessed 17 February 2021.
[6] Legislative Assembly (Asamblea Legislativa). 2 March 2012. "Law on Medicines" ("Ley de Medicamentos"). [https://www.medicamentos.gob.sv/index.php/es/normativa-m/leyesdnm-m/ley]. Accessed 17 February 2021.

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 insufficient public evidence that El Salvador has an expedited process for approving clinical trials for unregistered medical countermeasures (MCM) to treat ongoing epidemics. The National Ethics Committee for Health Research's (CNEIS) 2015 Manual of Standard Operating Procedures for Health Research Ethics Committees describes a process for expedited review and approval of clinical trials with a seven-day turnaround, but it is limited to trials that are deemed to be "minimal ethical risk", such as trials that are data-based or non-invasive. Such trials are evaluated by two or three members of the CNEIS without being submitted to the broader committee for discussion. [1] The CNEIS' 2017 Operations Manual does not describe an expedited review process that would apply for unregistered medical countermeasures (MCM) to treat ongoing epidemics. [2] In 2020, the CNEIS posted a document from the Pan American Health Organization titled "Orientation and Strategies to Speed Ethical Review and Supervision of Research Related to COVID-19", but there is no public evidence that the CNEIS has implemented any of the strategies described in the document. [3] The websites of the Ministry of Health, National Council of Science and Technology, CNEIS, and National Institute of Health do not contain additional public

information regarding an expedited process for approving clinical trials for unregistered medical countermeasures (MCM) to treat ongoing epidemics. [4, 5, 6, 7]

[1] National Ethics Committee for Health Research (Comité Nacional de Ética de la Investigación en la Salud). 2015. "Standard Procedures Manual of the National Ethics Committee for Health Research" ("Manual de Procedimientos Estándar del Comité Nacional de Ética de la Investigación en Salud"). [http://www.cneis.org.sv/wp-content/uploads/2018/07/manual_CNEIS.pdf]. Accessed 17 February 2021.
[2] National Ethics Committee for Health Research (Comité Nacional de Ética de la Investigación en la Salud). 2015. "Operations Manual". [https://www.cneis.org.sv/wp-content/uploads/2017/07/manual_funcionamiento_comite_nacional_etica_investigacion_en_salud.pdf]. Accessed 17 February 2021.
[3] Pan American Health Organization. 2020. "Orientation and Strategies to Speed Ethical Review and Supervision of Research Related to COVID-19". [https://www.cneis.org.sv/wp-content/uploads/2020/04/Covid-19-orientacion-estrategias-eticas-vf.pdf]. Accessed 17 February 2021.
[4] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 17 February 2021.
[5] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[6] National Ethics Committee for Health Research (Comité Nacional de Ética de la Investigación en la Salud). 2021. "CNEIS". [https://www.cneis.org.sv/]. Accessed 17 February 2021.
[7] National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología de El Salvador). 2021. "CONACYT". [https://www.conacyt.gob.sv/]. Accessed 11 February 2021.

4.7.2 Regulatory process for approving medical countermeasures

4.7.2a

Is there a government agency responsible for approving new medical countermeasures (MCM) for humans?

Yes = 1 , No = 0

Current Year Score: 1

There is public evidence that El Salvador has a government agency responsible for approving new medical countermeasures (MCM) for humans. [1] The National Directorate of Medicines (DNM) was created in 2012 by Article 3 of the Medicines Law (Legislative Decree No. 1008 of 2012). [2] The DNM is tasked with evaluating and approving new medical countermeasures for humans as established in Article 6 of the Law. [2] The DNM operates as an autonomous entity, made up of a director appointed by the country's Presidency and delegates from the Ministry of Health, Ministry of Economy, Consumer Protection Agency, the Salvadoran Institute of Social Security, Ministry of the Interior, University of El Salvador (Article 4). [2] In 2018, the Pan American Health Organization evaluated the DNM and El Salvador's pharmaceutical regulation system overall, with the goal of helping it achieve Level IV status, allowing it to function as a regional regulatory authority. [3]

[1] National Directorate of Medicines (Dirección Nacional de Medicamentos). 2021. "DNM". [https://www.medicamentos.gob.sv/index.php/es/]. Accessed 10 February 2021.
[2] Legislative Assembly (Asamblea Legislativa). 2 March 2012. "Law on Medicines" ("Ley de Medicamentos"). [https://www.medicamentos.gob.sv/index.php/es/normativa-m/leyesdnm-m/ley]. Accessed 17 February 2021.
[3] Pan American Health Organization. 2018. "El Salvador 2018 Technical Cooperation Activities". [https://www.paho.org/es/documentos/salvador-actividades-cooperacion-tecnica-2018]. Accessed 16 February 2021.

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: 0

There is no public evidence that El Salvador has an expedited process for approving medical countermeasures (MCM) for human use during public health emergencies. The National Directorate of Medicines (DNM) was created in 2012 by Article 3 of the Medicines Law (Legislative Decree No. 1008 of 2012). [2] Neither the DNM's website, nor the Law (Title III on Authorization and Registration) describe an expedited process for approving MCMs for human use during public health emergencies. [1, 2] The DNM's User's Guide for the Inscription of a New Sanitary Registration for Medicine and the Guide for Registration and Post-Registration Processes for Medical Devices do not mention an expedited process for approving MCMs. [3, 4] The websites of the Ministry of Health, National Council of Science and Technology, DNM, and National Institute of Health do not contain additional public information regarding an expedited process for approving medical countermeasures (MCM) for human use during public health emergencies. [1, 5, 6, 7]

[1] National Directorate of Medicines (Dirección Nacional de Medicamentos). 2021. "DNM". [https://www.medicamentos.gob.sv/index.php/es/]. Accessed 10 February 2021.
[2] Legislative Assembly (Asamblea Legislativa). 2 March 2012. "Law on Medicines" ("Ley de Medicamentos"). [https://www.medicamentos.gob.sv/index.php/es/normativa-m/leyesdnm-m/ley]. Accessed 17 February 2021.
[3] National Directorate of Medicines (Dirección Nacional de Medicamentos). 2020. "User's Guide for the Inscription of a New Sanitary Registration for Medicine". [https://www.medicamentos.gob.sv/index.php/es/servicios-m/descargables/category/3-productos-farmaceuticos?download=461:c02-rs-01-urv-gui01]. Accessed 18 February 2021.
[4] National Directorate of Medicines (Dirección Nacional de Medicamentos). 2016. "Guide for Registration and Post-Registration Processes for Medical Devices". [https://www.medicamentos.gob.sv/index.php/es/servicios-m/descargables/urim-m?download=345:guia-de-registro-y-tramites-post-registro-de-dispositivos-medicos]. Accessed 18 February 2021.
[5] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[6] National Institute of Health (Instituto Nacional de Salud). 2021. "INS". [http://ins.salud.gob.sv/]. Accessed 18 February 2021.
[7] National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología de El Salvador). 2021. "CONACYT". [https://www.conacyt.gob.sv/]. Accessed 11 February 2021.

Category 5: Commitments to improving national capacity, financing plans to address gaps, and adhering to global norms

5.1 INTERNATIONAL HEALTH REGULATIONS (IHR) REPORTING COMPLIANCE AND DISASTER RISK REDUCTION

5.1.1 Official IHR reporting

5.1.1a

Has the country submitted IHR reports to the WHO for the previous calendar year?

Yes = 1 , No = 0

Current Year Score: 1

2020

World Health Organization

5.1.2 Integration of health into disaster risk reduction

5.1.2a

Are epidemics and pandemics integrated into the national risk reduction strategy or is there a standalone national disaster risk reduction strategy for epidemics and pandemics?

Yes = 1 , No = 0

Current Year Score: 1

There is public evidence that El Salvador's Ministry of Health (MINSAL) has a National Disaster Risk Management Plan that includes epidemics and pandemics. MINSAL published the Plan in May 2017 as a political and strategic framework that provides the ministry with a tool for risk management planning and enforcement. [1] The Plan itself encompasses a series of 5-year comprehensive risk mitigation programs for all types of disasters (including pandemics), including programs such as developing methodologies and a system of indicators to identify and evaluate risk factors to human health in cases of disasters, health emergencies and health contingencies; strengthening institutional capacity in comprehensive disaster risk management, including the design of health intervention scenarios for each type of disaster at national and local levels, including pandemics; identifying vulnerabilities in the hospitals system; strengthening the national health alert and early warning system; implementing logistics supply management systems for doctors; and strengthening health response teams. [1] In 2021, MINSAL issued the Manual of Organization and Functions of the Risk Management and Disasters in Health Unit, which implements the elements of the Plan described above inside the ministry. [2] The Unit's mission includes "reducing vulnerability and risk, through preparation and response, that guarantee the continuity of health services during adverse events". [2]

[1] Ministry of Health (Ministerio de Salud). May 2017. "National plan on disaster risk management" ("Plan nacional de gestion de riesgos a desastres"). [http://asp.salud.gob.sv/regulacion/pdf/planes/plan_gestion_de_riesgos_desastres_v1.pdf]. Accessed 18 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2021. "Manual of Organization and Functions of the Risk Management and

Disasters in Health Unit".
[http://asp.salud.gob.sv/regulacion/pdf/manual/manual_organizacion_funciones_unidad_gestion_riesgos_y_desastres_salud_v1.pdf]. Accessed 18 February 2021.

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 public evidence that El Salvador has cross-border agreements as part of a regional group with regards to public health emergencies. El Salvador participates in the Technical Commission for Risk Management in Health (CTEGERS), which is part of the System of Central American Integration (SICA). SICA members include Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama, and Dominican Republic. CTEGERS exists to coordinate efforts among Central American public health authorities to strengthen their response to disaster and public health emergencies. It is supported by the regional health agenda put forth by the Council of Health Ministers of Central America (COMISCA). [1] El Salvador also participates in the SICA-organized Regional Mechanism for Mutual Assistance during Disasters (MecReg). The SICA member countries listed above are also members of MecReg. MecReg's goal is to "coordinate international humanitarian help and assistance within the framework of the System of Central American Integration". Specific actions promoted by MecReg related to public health emergencies include the creation of fast response health teams that participating countries can deploy to assist other countries, the creation of a regional list of medical supplies required based on the type of emergency or disaster and the operation of specialized groups to evaluate health problems and needs in emergencies. [2] Additionally, since July 2017, MecReg member countries adopted expedited procedures to ship humanitarian aid across their borders. [3] In terms of implementation, in March 2020 El Salvador joined its fellow COMISCA members in approving COMISCA Resolution 02-2020, which issued the "Regional Contingency Plan aimed at complementing national efforts for the prevention, containment and treatment of COVID-19 and other rapidly spreading diseases", which organizes and coordinates regional response and information sharing practices. [4]

[1] COMISCA Executive Secretariat (Secretaria Ejecutiva COMISCA). 2018. "Technical Commission for Risk Management in Health" ("Comisión Técnica para la Gestión del Riesgo en Salud (CTEGERS)").
[https://www.sica.int/consulta/documentos.aspx?ident=1488&IdCat=&IdMod=3&IdEntStyle=143]. Accessed 18 February 2021.
[2] System of Central American Integration (Sistema de la Integración Centroamericana). 2012. "Manual for the Coordination of International Help and Assistance for the System of Central American Integration, SICA" ("MANUAL PARA LA COORDINACIÓN DE LA AYUDA Y ASISTENCIA HUMANITARIA INTERNACIONAL DEL SISTEMA DE LA INTEGRACIÓN CENTROAMERICANA, SICA". [https://www.ifrc.org/docs/IDRL/Mec%20Reg%20SICA%202012.pdf]. Accessed 18 February 2021.
[3] ReliefWeb. 2017. "Central America Adopts New Procedure for the Transit of Humanitarian Relief Items".
[https://reliefweb.int/report/nicaragua/central-america-adopts-new-procedure-transit-humanitarian-relief-items]. Accessed 18 February 2021.
[4] COMISCA Executive Secretariat (Secretaria Ejecutiva COMISCA). 2020. "Resolution 02-2020".

[https://www.sica.int/download/?RESO_121785_1_19032020.pdf]. Accessed 18 February 2021.

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: 0

There is insufficient public evidence that El Salvador has cross-border agreements as part of a regional group with regards to animal health emergencies.

El Salvador is a member of the Regional International Organization for Agricultural Health (OIRSA). Mexico, Guatemala, Belize, Nicaragua, Honduras, Costa Rica, Panama and the Dominican Republic are also members of OIRSA. [1] OIRSA's objective is to "support the efforts of the member States to achieve the development of their animal and plant health plans and the strengthening of their quarantine systems". One of OIRSA's specific activities is to "promote the adoption of common Animal Health policies" with the "goals of prevention, control and/or eradication of agricultural pests and diseases of regional importance and interest" among member countries. [2] In terms of animal diseases, OIRSA's strategic objectives include, "designing and implementing emergency plans for an immediate response to each disease of economic importance". [7] OIRSA implements the Regional Cross-Border Illness Program, which supports member countries in the eradication of threats to animal health. In addition, the program is developing regional Good Emergency Management Practice manuals and a cross-border protocol for sales of livestock. [3] In El Salvador, OIRSA has supported the country to prevent and control brucellosis, foot-and-mouth disease, poultry diseases and other livestock diseases via disease-specific support programs as well as activities such as implementing livestock traceability, and delegating quarantine treatments and administration of agricultural chemical laboratories in the country to OIRSA. [4] OIRSA has also supported El Salvador with updating epidemiological surveillance protocols for Bovine spongiform encephalopathy. [5] In terms of implementation, in September 2020, OIRSA coordinated with Mexican authorities to provide El Salvador with biological controls for agricultural pests. [6]

[1] Regional International Organization for Agricultural Health (Organismo Internacional Regional de Sanidad Agropecuaria). 2021. "Representaciones". [https://www.oirsa.org/informacion.aspx?id=16]. Accessed 18 February 2021.
[2] Regional International Organization for Agricultural Health (Organismo Internacional Regional de Sanidad Agropecuaria). 2021. "Objetivo del OIRSA". [https://www.oirsa.org/informacion.aspx?id=8]. Accessed 18 February 2021.
[3] Regional International Organization for Agricultural Health (Organismo Internacional Regional de Sanidad Agropecuaria). 2021. "Regional Program for Cross-border Illnesses" ("Programa Regional de Enfermedades Transfronterizas"). [https://www.oirsa.org/noticia-detalle.aspx?id=7685]. Accessed 18 February 2021.
[4] Regional International Organization for Agricultural Health (Organismo Internacional Regional de Sanidad Agropecuaria). 2021. "El Salvador y el OIRSA". [https://www.oirsa.org/informacion.aspx?id=50]. Accessed 18 February 2021.
[5] Regional International Organization for Agricultural Health (Organismo Internacional Regional de Sanidad Agropecuaria). 2018. "Regional Program for Bovine Health" ("Programa Regional de Sanidad Bovina"). [https://www.oirsa.org/noticia-detalle.aspx?id=7668]. Accessed 18 February 2021.
[6] Regional International Organization for Agricultural Health (Organismo Internacional Regional de Sanidad Agropecuaria). 2020. "El Salvador receives biological agent from Mexico for control of locust pest". [https://es.calameo.com/read/004909973242c83f03fce]. Accessed 18 February 2021.
[7] Regional International Organization for Agricultural Health (Organismo Internacional Regional de Sanidad Agropecuaria). 2021. "Regional Directorate of Animal Health". [https://www.oirsa.org/informacion.aspx?id=19]. Accessed 24 February 2021.

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: 2

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: 0

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: 1

There is public evidence that El Salvador has allocated national funds to improve capacity to address epidemic threats within the past three years. The Ministry of Health's (MINSAL) Strategic Plan for the Prevention of the Reestablishment of Local Transmission of Malaria 2021-2025 details past and future funds invested in preventing and addressing this epidemic threat. In 2019, MINSAL invested US$4.2m in the program, which includes activities such as epidemiological surveillance, entomological surveillance and vector control, and laboratory surveillance, among others. Funds were also invested in laboratory supplies. In 2021, MINSAL expects to invest US$4.7m in the program. [1] In addition, MINSAL's Institutional Operations Plan (POI) for 2020 details some of its investments to improve capacity to address epidemic threats, including Objective 1.3 "to strengthen the appropriate response of the SNIS [National Integrated Health System] to emergencies, disasters and epidemics", which included Activity 1.3.1 "to carry out four technical assistance missions for the investigation of outbreaks of events of epidemic potential" and Activity 1.3.3 "to elaborate 5 emergency and contingency plans in 2 municipal micro-networks". [2] The POI does not specify precise budgets for the activities, but the overall budget for investment in health regions was US$218m of a total budget of US$729m. [2]

[1] Ministry of Health (Ministerio de Salud). 2020. "Strategic Plan for the Prevention of the Reestablishment of Local Transmission of Malaria 2021-2025".
[http://asp.salud.gob.sv/regulacion/pdf/planes/planestrategicoparalaprevenciondelrestablecimientodelatransmisi%C3%B3nautoctonadelamalaria2021-2025-Acuerdo1009.pdf]. Accessed 18 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2021. "Institutional Operations Plan (POI)".
[http://asp.salud.gob.sv/regulacion/pdf/planes/Plan_Operativo_Institucional_2020_MINSAL-Acuerdo518.pdf]. Accessed 18 February 2021.

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 public evidence that El Salvador has a publicly identified special emergency public financing mechanism and funds which the country can access in the face of a public health emergency. Legislative Decree No. 778 of 2005 issued the Law for

the Creation of the Fund for Civil Protection, Prevention and Mitigation of Disasters (FOPROMID). [1] Article 4 of the Law states that funds from the FOPROMID can be used for "disaster prevention" or "in those cases that demand a timely and effective emergency response caused by disasters". The law does not define disasters or specifically state that FOPROMID funds can be used in public health emergencies. Article 4 also states that funds can be used for events that have a national or localized impact. [1] In practice, during the COVID-19 pandemic, FOPROMID has been used to provide emergency funding for pandemic response. [2] In addition, in March 2020, the government created a US$2bn emergency response and economic reactivation fund for the COVID-19 pandemic. [3] These funds have been channeled through the FOPROMID for pandemic response. [2, 3]

[1] Legislative Assembly (Asamblea Legislativa). 2005. "Legislative Decree No. 778 of 2005, Law for the Creation of the Fund for Civil Protection, Prevention and Mitigation of Disasters". [https://www.transparencia.gob.sv/institutions/gd-san-miguel/documents/74377/download]. Accessed 18 February 2021.
[2] El Economista. 2021. "Anomalies found in handling of funds for COVID-19 emergency in El Salvador". [https://www.eleconomista.net/actualidad/Encuentran-anomalias-en-manejo-de-fondos-para-emergencia-covid-19-en-El-Salvador--20210202-0025.html]. Accessed 18 February 2021.
[3] Legislative Assembly (Asamblea Legislativa). 2020. "Emission of bonds is authorized for $2 billion for COVID-19 emergency". [https://www.asamblea.gob.sv/node/10199]. Accessed 18 February 2021.

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 no public evidence that El Salvador's senior leaders have in the past three years, have made public commitments to support other countries to improve capacity to address epidemic threats by providing financing or support or to improve the country's domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity. An updated National Health Policy is not publicly available. [1] The previous 2014-2019 National Health Policy did not include public commitments to support other countries or to improve the country's domestic capacity to address epidemic threats. [2] The Ministry of External Relations' section on international cooperation mentions that the government from 2014-2019 sought to work with other countries via South-South and Triangular Cooperation, but there is no mention of cooperation in the health sector. [3] The websites of the Ministry of Health, Ministry of External Relations, United Nations, and WHO do not contain additional information regarding a public commitment to support other countries to improve capacity to address epidemic threats by providing financing or support or to improve the country's domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity. [4, 5, 6, 7]

[1] Ministry of Health (Ministerio de Salud). 2021. "National Health Policies". [https://www.salud.gob.sv/politicas-nacionales-de-salud/]. Accessed 18 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2021. "2015-2019 National Health Policy". [https://www.salud.gob.sv/download/politica-nacional-de-salud-2015-

2019/?wpdmdl=15109&refresh=602e9539b74211613665593]. Accessed 18 February 2021.
[3] Ministry of Exterior Relations (Ministerio de Relaciones Exteriores). 2018. "South-South Cooperation". [http://cooperacion.rree.gob.sv/web/cooperacion-sur-sur-en-el-salvador/cooperacion-sur-sur]. Accessed 18 February 2021.
[4] United Nations. 2021. "Search Results >> el salvador". [https://news.un.org/en/search/el%20salvador/field_news_topics/health-82]. Accessed 31 January 2021.
[5] World Health Organization. 2021. "Search results". [https://www.who.int/home/search?indexCatalogue=genericsearchindex1&searchQuery=el%20salvador%20funding%20epidemic&wordsMode=AllWords&healthtopic=undefined&country=undefined]. Accessed 31 January 2021.
[6] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[7] Ministry of Exterior Relations (Ministerio de Relaciones Exteriores). 2021. "RR.EE.". [https://rree.gob.sv/]. Accessed 18 February 2021.

5.5.4b

Is there evidence that the country has, in the past three years, either:
- Provided other countries with financing or technical support to improve capacity to address epidemic threats?
- Requested financing or technical support from donors to improve the country's domestic capacity to address epidemic threats?

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

Current Year Score: 1

In El Salvador, there is public evidence that the country has, in the past three years, requested financing or technical support from donors to improve the country's domestic capacity to address epidemic threats. There is no public evidence that the country has, in the past three years, provided other countries with financing or technical support to improve capacity to address epidemic threats.

According to the Global Health Security Funding Tracking Dashboard, El Salvador received US$18.06m in 2019, and US$32.92m in 2020 to improve its own domestic capacity to address epidemic threats, including US$1.46m for D.2 – Real Time Surveillance, US$7.51m for D.1 – National Laboratory System, and US$23,180 for P.4 – Zoonotic Disease. [1] Specific projects included US$13.51m from the Global Fund for "Support to the Multisectoral National Strategic Plan for TB Control 2017-2021 (PENMTB)" and US$1.86m from the Global Fund for malaria elimination efforts. [1] In terms of supporting other countries, the Global Health Security Funding Tracking Dashboard does not list El Salvador as a funder for any projects in other countries. [2] The websites of the Ministry of Health, Ministry of Exterior Relations, United Nations, and WHO do not contain additional information regarding financing or technical support to other countries to improve capacity to address epidemic threats. [3, 4, 5, 6]

[1] GHS Tracking Dashboard. 2021. "El Salvador Recipient Profile". [https://tracking.ghscosting.org/details/934/recipient]. Accessed 18 February 2021.
[2] GHS Tracking Dashboard. 2021. "El Salvador Funder Profile". [https://tracking.ghscosting.org/details/934/funder]. Accessed 18 February 2021.
[3] Ministry of Exterior Relations (Ministerio de Relaciones Exteriores). 2021. "RR.EE.". [https://rree.gob.sv/]. Accessed 18 February 2021.
[4] United Nations. 2021. "Search Results >> el salvador". [https://news.un.org/en/search/el%20salvador/field_news_topics/health-82]. Accessed 31 January 2021.
[5] World Health Organization. 2021. "Search results". [https://www.who.int/home/search?indexCatalogue=genericsearchindex1&searchQuery=el%20salvador%20funding%20epidemic&wordsMode=AllWords&healthtopic=undefined&country=undefined]. Accessed 31 January 2021.

[6] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 15 February 2021.

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: 0

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 publicly available evidence that El Salvador has 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. During the 2020 COVID-19 pandemic, the country's 2020 National Preparation and Response Plan for the Novel Coronavirus (2019 – nCov) committed the Ministry of Health (MINSAL) to "exchange international epidemiological information". [1] MINSAL's 2014 Ebola Virus Contingency Plan states that the country will send specimens to international reference laboratories for testing and exchange epidemiological information internationally. [2] The websites of the Ministry of Health, Ministry of Agriculture and Ranching, and National Council of Science and Technology do not contain additional information regarding 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. [3, 4, 5]

[1] Ministry of Health (Ministerio de Salud). 2020. "National Preparation and Response Plan for the Novel Coronavirus (2019 – nCov)". [http://asp.salud.gob.sv/regulacion/pdf/planes/Plan-nacional-de-preparacion-y-resp-eventos-provocados-virus-resp-potencial-pandemico-svl-2020_v2.pdf]. Accessed 14 February 2021.
[2] Ministry of Health (Ministerio de Salud). 2014. "Ebola Virus Contingency Plan". [https://www.salud.gob.sv/archivos/pdf/promocion_salud/material_educativo/campana_Ebola/Plan_de_Contingencia_Virus_Ebola.pdf]. Accessed 15 February 2021.
[3] Ministry of Health (Ministerio de Salud). 2021. "MINSAL". [https://www.salud.gob.sv/]. Accessed 15 February 2021.
[4] National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología de El Salvador). 2021. "CONACYT". [https://www.conacyt.gob.sv/]. Accessed 11 February 2021.

[5] Ministry of Agriculture and Ranching (Ministerio de Agricultura y Ganadería). 2021. “MAG”. [http://www.mag.gob.sv/]. Accessed 11 February 2021.

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

In El Salvador, there is no public evidence that the country has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past two years. The 2016 External Evaluation of the Pandemic Influenza Preparedness Partnership Contribution does not refer to El Salvador not sharing samples, nor does it list El Salvador as a priority country for improving the "national ability to detect, monitor and share novel influenza viruses". [1] The WHO's website does not contain any information regarding El Salvador not sharing samples. [2] Local and international media do not contain reports of non-sharing.

[1] World Health Organization (WHO). 2016. "External Evaluation of the Pandemic Influenza Preparedness Partnership Contribution—High-Level Implementation Plan 2013-2016".
[http://www.who.int/about/evaluation/pip_evaluation_report.pdf]. Accessed 24 January 2021.
[2] World Health Organisation (WHO). 2021. “El Salvador”. [https://www.who.int/countries/slv/]. Accessed 14 February 2021.

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 publicly available evidence that El Salvador has not shared pandemic pathogen samples during an outbreak in the past two years. The World Health Organization does not mention that El Salvador has not shared samples during an outbreak, including samples related to the COVID-19 pandemic. [1] Local and international media do not contain reports of non-sharing in El Salvador, including samples related to the COVID-19 pandemic.

[1] World Health Organisation (WHO). 2021. “El Salvador”. [https://www.who.int/countries/slv/]. Accessed 14 February 2021.

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: 1

2020

Economist Intelligence

6.1.1c

Excessive bureaucracy/red tape (Economist Intelligence score; 0-4, where 4=best)

Input number

Current Year Score: 2

2020

Economist Intelligence

6.1.1d

Vested interests/cronyism (Economist Intelligence score; 0-4, where 4=best)

Input number

Current Year Score: 1

2020

Economist Intelligence

6.1.1e

Country score on Corruption Perception Index (0-100, where 100=best)

Input number

Current Year Score: 36

2020

Transparency International

6.1.1f

Accountability of public officials (Economist Intelligence score; 0-4, where 4=best)

Input number

Current Year Score: 1

2020

Economist Intelligence

6.1.1g

Human rights risk (Economist Intelligence score; 0-4, where 4=best)

Input number

Current Year Score: 2

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: 0

2020

UN Office of Drugs and Crime (UNODC)

6.1.4c

How high is the risk of organized criminal activity to the government or businesses in the country?

Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0

Current Year Score: 0

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: 0

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: 89.01

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: 0.6

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: 0.3

2018

World Bank; Economist Impact

6.2.3b

Share of employment in the informal sector

Greater than 50% = 2, Between 25-50% = 1, Less than 25% = 0

Current Year Score: 1

According to the World Bank data website, using data from the International Labour Organization's ILOSTAT database, in 2019 El Salvador's vulnerable employment as a percentage of total employment was 34.61%. [1]

[1] World Bank. 2021. “Vulnerable employment, total (% of total employment) (modeled ILO estimate) - El Salvador”. [https://data.worldbank.org/indicator/SL.EMP.VULN.ZS?locations=SV&view=chart]. Accessed 18 February 2021.

6.2.3c

Coverage of social insurance programs (% of population)

Scored in quartiles (0-3, where 3=best)

Current Year Score: 1

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: 1

2021

Economist Intelligence Democracy Index

6.2.6 Inequality

6.2.6a

Gini coefficient

Scored 0-1, where 0=best

Current Year Score: 0.39

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: 1

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: 2

2021

Economist Intelligence

6.3.3 Adequacy of power network

6.3.3a

What is the risk that power shortages could be disruptive?

Very low = 4, Low = 3, Moderate = 2, High = 1, Very high = 0

Current Year Score: 3

2021

Economist Intelligence

6.4 ENVIRONMENTAL RISKS

6.4.1 Urbanization

6.4.1a

Urban population (% of total population)

Input number

Current Year Score: 72.75

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: -2.17

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: 1

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: 73.1

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: 392.7

2019

WHO

6.5.1c

Population ages 65 and above (% of total population)

Input number

Current Year Score: 8.47

2019

World Bank

6.5.1d

Prevalence of current tobacco use (% of adults)

Input number

Current Year Score: 12.7

2018

World Bank

6.5.1e

Prevalence of obesity among adults

Input number

Current Year Score: 24.6

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: 97.39

2017

UNICEF; Economist Impact

6.5.2b

Percentage of homes with access to at least basic sanitation facilities

Input number

Current Year Score: 87.43

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: 378.22

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: 1

2018

Wellcome Trust Global Monitor 2018