

Hungary

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

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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 evidence for a national AMR plan for the surveillance, detection, and reporting of AMR pathogens. The World Health Organization (WHO) library of national action plans on AMR does not list one for Hungary. [1] The websites of the Ministry of Human Resources, the Ministry of Agriculture, and the National Center for Public Health (NCPH) do not contain relevant information either. [2] [3] [4] An archived version of website of the National Public Health and Medical Officer Service, which became the NNK in 2018, contains a subpage titled "Antibiotic resistance", but it is empty. [5] However, in September 2019 the Ministry of Agriculture and the National Food Chain Safety Office launched an educational website on antimicrobial and antibiotic resistance, aimed at laypeople, called "How long it is effective?", which contains a short document that is referred to as the AMR National Strategy. [6] The document itself is titled "Veterinary measures to reduce antimicrobial resistance" and gives an overview of the international and national situation on AMR and the national use of veterinary antibiotics. In its six chapters it summarizes legal measures to limit the use of antibiotics, the introduction of AMR into education, rethinking of the role of the authorities in the matter (such as more control and evaluation and limiting advertising of antibiotics), improving cooperation between authorities, industry and science and cooperation with human healthcare, rethinking of financial support to promote alternatives to antibiotics (such as vaccines) and changing the monitoring system to obtain relevant data. [7] According to the "Global Database for Antimicrobial Resistance Country Self Assessment" Hungary has developed a national AMR plan. [8]

[1] World Health Organisation (WHO). "Library of National Action Plans". Geneva: World Health Organisation.

[<http://www.who.int/antimicrobial-resistance/national-action-plans/library/en/>]. Accessed 24 October 2020.

[2] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-minisztariuma>]. 24 October 2020.

[3] Ministry of Agriculture (Agrárminisztérium). [<https://kormany.hu/agrarminisztarium>]. Accessed 24 October 2020.

[4] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>]. Accessed 24 October 2020.

[5] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). 2017. "Antibiotics resistance" ("Antibiotikum rezisztencia"). [https://www.antsz.hu/felso_menu/temaink/jarvany/antrez] Accessed 24 October 2020.

[6] Ministry of Agriculture and National Food Chain Safety Office. "How long it is effective?" ("Meddig hat?"). [<https://meddighat.hu/>] Accessed 24 October 2020.

[7] Ministry of Agriculture and National Food Chain Safety Office. "Veterinary measures to reduce antimicrobial resistance" ("Az antimikrobiális rezisztencia csökkentésére irányuló állategészségügyi intézkedések") [https://meddighat.hu/wp-content/uploads/2020/03/AMR_nemzeti_strat%C3%A9gia.pdf] Accessed 24 October 2020

[8] World Health Organisation (WHO). 2019-2020. "Global Database for the Tripartite Antimicrobial Resistance (AMR)

Country Self-assessment Survey (TrACSS) ". [<http://amrcountryprogress.org/>] Accessed 25 October 2020

1.1.1b

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

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

Current Year Score: 2

Hungary has a national laboratory system that tests for all 7+1 priority AMR pathogens. The National Centre for Epidemiology (NCE) tests for multi-resistant pathogens at the National Reference Laboratory, including *E. coli*, *K. pneumoniae*, *S. aureus*, *S. pneumoniae*, *Salmonella* spp., and *Shigella* spp. [1, 2, 3] *N. gonorrhoeae* is tackled in a similar fashion, but samples are dealt with by the Bacterial Sexually Transmitted Infection National Reference Laboratory at the NCE. [3] Tests for mycobacterium tuberculosis are carried out at the National "Korányi" Tuberculosis and Pulmonology Centre. [4, 5, 6] The NCE has designated sentinel sites. [7] NCE conducts ongoing event-based surveillance and analysis for infectious diseases being published weekly and yearly by the National Center for Public Health. [8]

[1] National Centre for Epidemiology (Országos Epidemiológiai Központ). "List of multi-resistant pathogens" ("Multirezisztens kórokozók listája"). [<http://oek.hu/oekfile.pl?fid=4694>]. Accessed 25 October 2020.

[2] National Centre for Epidemiology (Országos Epidemiológiai Központ). 2017. "Antibiotic resistance results of the domestic microbiological surveillance" ("A hazai mikrobiológiai surveillance antibiotikum rezisztencia eredményei"). [<http://oek.hu/oek.web?nid=666&pid=12>]. Accessed 25 October 2020.

[3] National Centre for Epidemiology (Országos Epidemiológiai Központ). "Laboratories of the Epidemiological Microbiology Reference Centre" ("Az OEK járványügyi mikrobiológiai referencia központ laboratóriumai"). [<http://oek.hu/oekfile.pl?fid=6704>]. Accessed 25 October 2020.

[4] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree No. 18/1998 of the Minister for Public Health (Annex 1)" ("18/1998. (XII. 27.) EüM rendelet (1.számú melléklet)"). [<https://net.jogtar.hu/jogszabaly?docid=99800018.EUM>]. Accessed 25 October 2020.

[5] National Centre for Epidemiology (Országos Epidemiológiai Központ). "Rare Microbiological Tests related to Tuberculosis" ("TBC-vel kapcsolatos ritka mikrobiológiai vizsgálatok"). [<http://www.oek.hu/oek.web?nid=1006&pid=1>]. Accessed 25 October 2020.

[6] Zsarnóczay, István. "Presentation on the Tuberculosis Surveillance System" ("A TBC Surveillance Rendszer"). 28 Nov 2011. [http://www.kardio.hu/feltoltott/egyeb/fajl_2011111814571201_8_zsarloczay.pdf]. Accessed 25 October 2020.

[7] National Centre for Epidemiology (Országos Epidemiológiai Központ). "Antibiotic resistance results of the domestic microbiological surveillance" ("A hazai mikrobiológiai surveillance antibiotikum rezisztencia eredményei"). [<http://oek.hu/oek.web?to=2475&nid=1269&pid=1&lang=hun>]. Accessed 25 October 2020.

[8] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "Data on Pandemic Diseases" ("Fertőző betegségek adatai"). [https://www.antsz.hu/felso_menu/temaink/jarvany/Fertozo_betegsegek/fertozo]. Accessed 25 October 2020.

1.1.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence of detection or surveillance of AMR pathogens in Hungary. The National Center for Public Health (and until 2018, the Public Health Directorate of the National Public Health Institute) conducts detection and surveillance activities of some AMR pathogens in drinking water and bathwater such as *E. coli* and *Salmonella*. [1] Soil is monitored through comprehensive chemical and microbiological tests, but AMR pathogen testing is not explicitly mentioned. [1] Responsibility for environmental issues in Hungary is split between the Ministry of Agriculture (responsible for natural conservation), and the Ministry of Innovation and Technology (responsible for climate policy and sustainable development), and there is no evidence of further detection or surveillance activities on either's website. [2, 3]

[1] National Center for Public Health (Nemzeti Népegészségügyi Központ)

[<https://www.nnk.gov.hu/index.php/kozegeszsegugyi-laboratoriumi-foosztaly/kozegeszsegugyi-laboratoriumi-foosztaly-kezdolapja>] Accessed 25 October 2020.

[2] National Public Health Institute (Országos Közegészségügyi Intézet). "Our services" ("Szolgáltatásaink").

[<http://oki.antsz.hu/szolgáltatásaink>]. Accessed 25 October 2020.

[2] Government of Hungary (Magyarország Kormánya). "State Secretariat of Natural Conservation" ("Környezetügyért Felelős Államtitkárság"). [<https://kormany.hu/agrarminiszterium/kornyezetugy>]. Accessed 25 October 2020.

[3] Ministry of Innovation and Technology (Innovációs és Technológiai Minisztérium). [<https://kormany.hu/innovacios-es-technologiai-miniszterium>]. Accessed 25 October 2020.

1.1.2 Antimicrobial control

1.1.2a

Is there national legislation or regulation in place requiring prescriptions for antibiotic use for humans?

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

Current Year Score: 2

Prescriptions are required for antibiotics in Hungary, and there is no evidence of gaps in enforcement. [1] The National Institute for Pharmacy and Nutrition regulates whether prescriptions are obligatory for a certain medication based on the criteria established in Art. 18(3) of Decree No. 52/2005 of the Minister for Health on Placing Medicines for Human Use on the Market. [2] Specific information per medicine is available in the national Medicine Database. [3] This information shows that the five most common human antibiotics in Hungary (amoxicillin, ciprofloxacin, cefuroxime, levofloxacin, clarithromycin) all require prescription. [3, 4] However, there are lozenges and gels that contain the antibiotic tyrothricin but do not require prescription. [5]

[1] National Health Insurance Fund of Hungary (Nemzeti Egészségbiztosítási Alapkezelő). 05 February 2020. "Medicine Supply" ("Gyógyszerellátás").

[http://www.neak.gov.hu/felso_menu/lakossagnak/ellatas_magyarorszagon/gyogyszer_segedeszkoz_gyogyfuro_tamogatas/gyogyszer_tamogatas/gyogyszerellatas.html#A%20gy%C3%B3gyszer%20v%C3%A1s%C3%A1rl%C3%A1s%C3%A1hoz%20vagy%20a%20t%C3%A1mogat%C3%A1shoz%20sz%C3%B3k%C3%A9ges%20a%20v%C3%A9ny?]. Accessed 25 October 2020.

[2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 25 October 2020. "Decree No. 52/2005 of the Minister for Health on Placing Medicines for Human Use on the Market" ("52/2005. (XI. 18.) EüM rendelet az emberi alkalmazásra kerülő gyógyszerek forgalomba hozataláról"). [<https://net.jogtar.hu/jogszabaly?docid=a0500052.eum>]. Accessed 25 October 2020.

[3] National Institute for Pharmacy and Nutrition (Országos Gyógyszerészeti és Élelmezés-egészségügyi Intézet). "Medicine Database" ("Gyógyszer-adatbázis"). [<https://www.ogyei.gov.hu/gyogyszeradatbazis/>]. Accessed 25 October 2020.

[4] Benko, Ria et. al. 2016. 'Domestic Antibiotic Use in Hospitals in the Past Two Decades (1996-2015)' ('Hazai kórházi

antibiotikum-alkalmazás az elmúlt két évtizedben (1996-2015)). Orvosi Hetilap, 157, 46: 1839-1846.

[5] National Institute for Pharmacy and Nutrition (Országos Gyógyszerészeti és Élelmezés-egészségügyi Intézet). "Medicine Database" ("Gyógyszer-adatbázis").

[https://ogyei.gov.hu/index.php?csrf=aef002819af9fa32808e74aeceae0a2&url=gyogyszeradatbazis&action=process&ordering=name_str&freetext=&product_name=&medicine_name=&dosage_form=0&marketing_authorisation=0&active_substance=1680&atc_code=®istration_number=&dic_prescription=0&authorisation_date_from=&authorisation_date_to=&revoke_date_from=&revoke_date_to=] Accessed 25 October 2020.

1.1.2b

Is there national legislation or regulation in place requiring prescriptions for antibiotic use for animals?

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

Current Year Score: 2

A veterinary prescription is required to purchase medicines containing antibiotics in animal healthcare, and there is no evidence of gaps in enforcement. [1] The National Food Chain Security Office regulates prescriptions for animal healthcare products in Hungary. More information per veterinary medicine is available in the online database for authorised veterinary products. [2] The five most widely used animal antibiotics (betamox, doxylin, pharasin, roxacin, pendistrep) all require prescription. [2, 3] Hungary complies with the European Union's Regulation (EC) No 726/2004 procedures for the authorisation and supervision of medicinal products for human and veterinary use. The country also implements Directive 2001/82/EC of the European Parliament and of the Council on the code relating to veterinary medicinal products (via Decree No. 128/2009 of the Minister for Agriculture on Animal Healthcare Products). [1]

[1] Nemes-Terényi, Melinda, Dr. 2019. "The legal background of the authorization and usage of antibiotics" ("Az antibiotikumok engedélyezésének és felhasználásának jogszabályi háttere"). Directorate for Animal Healthcare Products at the National Food Chain Security Office (Nemzeti Élelmiszerlánc-biztonsági Hivatal Állatgyógyászati Termékek Igazgatósága). [<http://derzsy-napok.hu/wp-content/themes/livestudio/assets/images/front/eloadasok/2019/Nemes-TernyiMelinda-Azantibiotikumokengedelyezsneksfelhasznslakjogszablyihttere.pdf>] Accessed 25 October 2020.

[2] National Food Chain Security Office (Nemzeti Élelmiszerlánc-biztonsági Hivatal). "Authorised Veterinary Medicinal Products in Hungary" ("Magyarországon engedélyezett állatgyógyászati készítmények").

[<https://atiportal.nebih.gov.hu/moengallatgykesz.html>]. Accessed 25 October 2020.

[3] "Animal Medicine" ("Állatgyógyszer"). [<https://www.allatgyogyszer.hu>]. Accessed 25 October 2020.

1.2 ZOONOTIC DISEASE

1.2.1 National planning for zoonotic diseases/pathogens

1.2.1a

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

Yes = 1 , No = 0

Current Year Score: 1

Hungary has a national law on zoonotic disease. Decree of the Minister of Agriculture No. 81/2002 on the Animal Healthcare Related Tasks in Preventing Zoonotic Diseases discusses zoonotic diseases in terms of being a risk to human health and sets forth regulation on the management and prevention of zoonotic diseases in animal healthcare. [1] The Decree covers brucellosis, anthrax, mycobacterial tuberculosis, aphthae epizootic, malleus, transmissible spongiform encephalopathies

(TSE) and rabies as notifiable diseases and other zoonotic diseases that are not notifiable to state agencies. [1] As per Annex Point 2 of the Law XLVI of 2008 on Food Chain and Regulatory Oversight, zoonoses are regulated together with animal healthcare through the National Food Chain Security Office. [2] National veterinary programmes cover animal diseases in general, without discussing zoonotic diseases specifically in terms of being risks to human health. Plans are technical and focus on the implementation of European Union legal norms and programmes. [3]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 25 October 2020. "Decree of the Minister of Agriculture No. 81/2002 on the Animal Healthcare Related Tasks in Preventing Zoonotic Diseases" ("81/2002. (IX. 4.) FVM rendelet a zoonózisok elleni védekezés állat-egészségügyi feladatairól"). [<https://net.jogtar.hu/jogszabaly?docid=a0200081.fvm>]. Accessed 25 October 2020.

[2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 25 October 2020. "Law XLVI of 2008 on Food Chain and Regulatory Oversight" ("2008. évi XLVI. törvény az élelmiszerláncról és hatósági felügyeletéről"). [<https://net.jogtar.hu/jogszabaly?docid=a0800046.tv>]. Accessed 25 October 2020.

[3] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 25 October 2020. "Decree 32/2020 of the Minister for Agriculture on Financial Regulations of the 2020 National Programme for the Eradication, Control and Surveillance of a List of animal diseases and Zoonoses" ("32/2020. (VI. 26.) AM rendelet az egyes állatbetegségek és zoonózisok felszámolására, az ellenük való védekezésre és figyelemmel kísérésükre irányuló nemzeti programok 2020. évi finanszírozásának szabályairól"). [<https://net.jogtar.hu/jogszabaly?docid=A2000032.AM>]. Accessed 25 October 2020.

1.2.1b

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

Yes = 1 , No = 0

Current Year Score: 0

Hungary has legislation on zoonotic disease, but it does not include measures for risk identification and reduction for spillover events from animals to human. Decree of the Minister of Agriculture No. 81/2002 on Animal Healthcare-Related Tasks in Preventing Zoonotic Diseases discusses measures on the management and prevention of zoonotic diseases in animal healthcare. [1] The decree names brucellosis, anthrax, mycobacterial tuberculosis, aphthae epizootic, malleus, transmissible spongiform encephalopathies (TSE) and rabies as diseases that have to be notified, and other zoonotic diseases that are not notifiable to state agencies. The decree does not discuss pathways for transmission of zoonotic diseases explicitly, but there is one disease where the pathway for transmission can be deduced, namely rabies. The decree requires annual immunisation of dogs against rabies, and at the same time treating the dog with a broad-spectrum anthelmintic, and requires that treatments be recorded. [1] National veterinary programmes cover animal diseases in general, without discussing diseases specifically in terms of being risks to human health. [2] No evidence found on the sites of the Ministry of Humna Capacities, National Public Health and Medical Officer Service, Ministry of Agriculture, National Food Chain Security Office, National Center for Public Health. [3] [4] [5] [6] [7]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 25 October 2020. "Decree of the Minister of Agriculture No. 81/2002 on the Animal Healthcare Related Tasks in Preventing Zoonotic Diseases" ("81/2002. (IX. 4.) FVM rendelet a zoonózisok elleni védekezés állat-egészségügyi feladatairól"). [<https://net.jogtar.hu/jogszabaly?docid=a0200081.fvm>]. Accessed 25 October 2020.

[2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 25 October 2020. "Decree 32/2020 of the Minister for Agriculture on Financial Regulations of the 2020 National Programme for the Eradication, Control and Surveillance of a List of animal diseases and Zoonoses" ("32/2020. (VI. 26.) AM rendelet az egyes állatbetegségek és zoonózisok felszámolására, az ellenük való védekezésre és figyelemmel kísérésükre irányuló nemzeti programok 2020. évi finanszírozásának szabályairól").

[https://net.jogtar.hu/jogszabaly?docid=A2000032.AM]. Accessed 25 October 2020.

[3] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [http://www.kormany.hu/hu/emberi-eroforrasok-minisztariuma]. Accessed 25 October 2020.

[4] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). [https://www.antsz.hu]. Accessed 25 October 2020.

[5] Ministry of Agriculture (Agrárminisztérium). [https://kormany.hu/agrarminisztarium]. Accessed 25 October 2020.

[6] National Food Chain Security Office (Nemzeti Élelmiszerlánc-biztonsági Hivatal). [http://portal.nebih.gov.hu]. Accessed 25 October 2020.

[7] National Center for Public Health (Nemzeti Népegészségügyi Központ). [https://www.nnk.gov.hu/] Accessed 25 October 2020.

1.2.1c

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of legislation, plans or guidelines that account for the surveillance or control of multiple zoonotic pathogens of public health concern. The role of animal healthcare in preventing zoonotic diseases are regulated by the Decree of the Minister of Agriculture No. 81/2002. [1] This requires a number of zoonotic diseases to be reported to the authorities: brucellosis, anthrax, mycobacterial tuberculosis, foot-and-mouth disease (aphthae epizooticae), malleus, transmissible spongiform encephalopathies (TSEs) and rabies (lyssa). The Minister of Agriculture regulates what zoonotic diseases are to be reported to the National Food Chain Safety Office as per article 51(1)-51(2) of the Law XLVI of 2008 on Food Chain and Regulatory Oversight. [2] Besides the listed diseases, newly discovered pathogens that are dangerous for commerce or humans can also be required to be reported. If it is required for stopping, preventing or observing outbreaks the Minister can use a set of measures, from lockdowns, vaccinations, disinfection to forced slaughter. However there are no publicly available plans otherwise addressing the surveillance or control of specific zoonotic pathogens, including on the websites of the Ministry of Human Capacities, the National Public Health and Medical Officer Service, the Ministry of Agriculture, the National Food Chain Security Office or the National Center for Public Health. [3] [4] [5] [6] [7]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree of the Minister of Agriculture No. 81/2002 on the Animal Healthcare Related Tasks in Preventing Zoonotic Diseases" ("81/2002. (IX. 4.) FVM rendelet a zoonózisok elleni védekezés állat-egészségügyi feladatairól"). [https://net.jogtar.hu/jogszabaly?docid=a0200081.fvm]. Accessed 27 October 2020.

[2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 25 October 2020. "Law XLVI of 2008 on Food Chain and Regulatory Oversight" ("2008. évi XLVI. törvény az élelmiszerláncról és hatósági felügyeletéről"). [https://net.jogtar.hu/jogszabaly?docid=a0800046.tv]. Accessed 25 October 2020.

[3] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [http://www.kormany.hu/hu/emberi-eroforrasok-minisztariuma]. Accessed 27 October 2020.

[4] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). 2015. "Tasks and Operation of the National Public Health and Medical Officer Service" ("Az Állami Népegészségügyi és Tisztiorvosi Szolgálat feladatai és működése") [https://www.antsz.hu/felso_menu/rolunk]. Accessed 27 October 2020.

[5] Ministry of Agriculture (Agrárminisztérium). [https://kormany.hu/agrarminisztarium]. Accessed 27 October 2020.

[6] National Food Chain Security Office (Nemzeti Élelmiszerlánc-biztonsági Hivatal). "Animal Health and Animal Protection

Directorate. Tasks." ("Állat-egészségügyi és Állatvédelmi Igazgatóság. Feladatok."). [<http://portal.nebih.gov.hu/allat-egeszsegugyi-es-allatvedelmi-igazgatosag>]. Accessed 27 October 2020.

[7] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>] Accessed 27 October 2020.

1.2.1d

Is there a department, agency, or similar unit dedicated to zoonotic disease that functions across ministries?

Yes = 1, No = 0

Current Year Score: 0

There is no public evidence that Hungary has a cross-ministry department unit on zoonotic diseases. Healthcare issues are handled by the Ministry of Agriculture and the Ministry of Human Capacities (which is responsible for human healthcare), and neither's website contains evidence of such a unit. [1] [2] Article 4 of the Decree of the Minister of Agriculture No. 81/2002 on the Animal Healthcare Related Tasks in Preventing Zoonotic Diseases says that the National Food Chain Safety Office (NFCSO) informs the regional human healthcare office if it detects a zoonotic pathogen or a disease is diagnosed. [3] Communication also takes place within the National Infection Control and Antibiotics Committee (NICAC). NICAC is an advisory body created by the Ministry of Human Capacities mainly focused on healthcare-associated infections and antibiotics resistance, and its among its permanent members, besides the ones subordinated to the minister responsible for health, a representative of the NFCSO (which operates under the Ministry of Agriculture). One of the tasks of NICAC is to, according to Article 13 e) to "facilitate cooperation between human and animal healthcare to fight antimicrobial resistance" [4]. Thus there is communication between the departments, but no sign of a zoonotic disease-focused, permanent cross-department unit.

[1] National Food Chain Security Office (Nemzeti Élelmiszerlánc-biztonsági Hivatal). "Animal Health and Animal Protection Directorate. Tasks." ("Állat-egészségügyi és Állatvédelmi Igazgatóság. Feladatok."). [<http://portal.nebih.gov.hu/allat-egeszsegugyi-es-allatvedelmi-igazgatosag>]. Accessed 27 October 2020.

[2] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>] Accessed 27 October 2020.

[3] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree of the Minister of Agriculture No. 81/2002 on the Animal Healthcare Related Tasks in Preventing Zoonotic Diseases" ("81/2002. (IX. 4.) FVM rendelet a zoonózisok elleni védekezés állat-egészségügyi feladatairól"). [<https://net.jogtar.hu/jogszabaly?docid=a0200081.fvm>]. Accessed 28 October 2020.

[4] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree No. 20/2009 of the Minister for Health on the Prevention of Healthcare-Associated Infections, its Professional Minimal Requirements and Surveillance" ("20/2009. (VI. 18.) EüM rendelet az egészségügyi ellátással összefüggő fertőzések megelőzéséről, e tevékenységek szakmai minimumfeltételeiről és felügyeletéről"). [<https://net.jogtar.hu/jogszabaly?docid=a0900020.eum>]. Accessed 28 October 2020.

1.2.2 Surveillance systems for zoonotic diseases/pathogens

1.2.2a

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

Yes = 1, No = 0

Current Year Score: 1

Hungary has a mandatory mechanism for livestock owners to report diseases. According to article 18(1) f) of Law XLVI of 2008, farmers are obliged to notify all diseases and suspected diseases to both the National Food Chain Security Office (NFCSO) and the veterinarian. The animal has to be diagnosed and in case the disease is contagious, owners must follow the orders of and cooperate with the veterinarian and NFCSO. [1] According to Decree No. 113/2008 of the Minister for Agriculture on the Mechanism of Reporting Animal Diseases, reporting happens through in-person visits, written notifications or via a commissioned agent. Owners and other people responsible for the animals must report diseases even if there are other people who are obliged to report it. [2]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Law XLVI of 2008 on Food Chain and Regulatory Oversight" ("2008. évi XLVI. törvény az élelmiszerláncról és hatósági felügyeletéről").

[https://net.jogtar.hu/jogszabaly?docid=a0800046.tv]. Accessed 28 October 2020.

[2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree No. 113/2008 of the Minister for Agriculture on the Mechanism of Reporting Animal Diseases" ("113/2008. (VIII. 30.) FVM rendelet az állatbetegségek bejelentésének rendjéről") [https://net.jogtar.hu/jogszabaly?docid=a0800113.fvm]. Accessed 28 October 2020.

1.2.2b

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

Yes = 1 , No = 0

Current Year Score: 1

There is legislation that safeguards the owners' confidentiality regarding information generated through surveillance activities for animals. The mechanism that obliges livestock owners to notify all diseases, and suspected diseases, to the National Food Chain Security Office (NFCSO) requires submitting the livestock owner's name and home or business address, as per article 3(4) of Decree No. 113/2008 of the Minister for Agriculture on the Mechanism of Reporting Animal Diseases. [1] The confidentiality of the submitted data is safeguarded by article 28 of Law CL of 2016 on the General Order of Proceedings in Public Administration, which guarantees closed (confidential) data management, as in other administrative proceedings. NFCSO is required by law to keep personal identification data and addresses separately so that they cannot be disclosed during any procedural acts. [2]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Law CL of 2016 on the General Order of Proceedings in Public Administration" ("2016. évi CL. törvény az általános közigazgatási rendtartásról").

[https://net.jogtar.hu/jogszabaly?docid=A1600150.TV]. Accessed 28 October 2020.

[2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree No. 113/2008 of the Minister for Agriculture on the Mechanism of Reporting Animal Diseases" ("113/2008. (VIII. 30.) FVM rendelet az állatbetegségek bejelentésének rendjéről") [https://net.jogtar.hu/jogszabaly?docid=a0800113.fvm]. Accessed 28 October 2020.

1.2.2c

Does the country conduct surveillance of zoonotic disease in wildlife (e.g., wild animals, insects, other disease vectors)?

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that the country conducts surveillance of zoonotic disease in wildlife. Persons entitled to hunt are required to notify the National Food Chain Security Office about infectious diseases they see or suspect in wildlife, or any significant mortality they notice, as per article 35 (2) of the Law LV of 1996 on Wildlife Protection. [1] Samples from wild animals suspected of being affected with a disease, including but not specifically focusing on zoonotic ones, are tested at the Mammal, Wild Animal and Poultry Disease Laboratory of the Animal Healthcare Diagnostics Directorate at the National Food Chain Security Office (which is responsible for zoonotic diseases). [2,3] However, there is no evidence that the government conducts surveillance of zoonotic disease in wildlife on the websites of the Ministry of Human Capacities, the National Public Health and Medical Officer Service, the Ministry of Agriculture, the National Food Chain Security Office or the National Center for Public Health. [4] [5] [6] [7] [8]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Law LV of 1996 on Wildlife Protection, Wildlife Management and Hunting" ("1996. évi LV. törvény a vad védelméről, a vadgazdálkodásról, valamint a vadászatról").

[https://net.jogtar.hu/jogszabaly?docid=99600055.tv]. Accessed 28 October 2020.

[2] National Food Chain Safety Agency (Nemzeti Élelmiszerlánc-biztonsági Hivatal). "Animal Healthcare Diagnostics Directorate" ("Állat-egészségügyi Diagnosztikai Igazgatóság"). [http://portal.nebih.gov.hu/allat-egeszsegugyi-diagnosztikai-igazgatosag]. Accessed 28 October 2020.

[3] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Law XLVI of 2008 on Food Chain and Regulatory Oversight" ("2008. évi XLVI. törvény az élelmiszerláncról és hatósági felügyeletéről").

[https://net.jogtar.hu/jogszabaly?docid=a0800046.tv]. Accessed 28 October 2020.

[4] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [http://www.kormany.hu/hu/emberi-eroforrasok-miniszteriuma]. Accessed 28 October 2020.

[5] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). 2015. "Tasks and Operation of the National Public Health and Medical Officer Service" ("Az Állami Népegészségügyi és Tisztiorvosi Szolgálat feladatai és működése") [https://www.antsz.hu/felso_menu/rolunk]. Accessed 28 October 2020.

[6] Ministry of Agriculture (Agrárminisztérium). [https://kormany.hu/agrarminiszterium]. Accessed 28 October 2020.

[7] National Food Chain Security Office (Nemzeti Élelmiszerlánc-biztonsági Hivatal). "Animal Health and Animal Protection Directorate. Tasks." ("Állat-egészségügyi és Állatvédelmi Igazgatóság. Feladatok."). [http://portal.nebih.gov.hu/allat-egeszsegugyi-es-allatvedelmi-igazgatosag]. Accessed 28 October 2020.

[8] National Center for Public Health (Nemzeti Népegészségügyi Központ). [https://www.nnk.gov.hu/] Accessed 28 October 2020.

1.2.3 International reporting of animal disease outbreaks

1.2.3a

Has the country submitted a report to OIE on the incidence of human cases of zoonotic disease for the last calendar year?

Yes = 1, No = 0

Current Year Score: 0

2019

OIE WAHIS database

1.2.4 Animal health workforce

1.2.4a

Number of veterinarians per 100,000 people

Input number

Current Year Score: 39.56

2018

OIE WAHIS database

1.2.4b

Number of veterinary para-professionals per 100,000 people

Input number

Current Year Score: 7.4

2018

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 no evidence of efforts to involve the private sector in controlling or responding to zoonoses. [1, 2] The Decree of the Minister of Agriculture No. 81/2002 on the Animal Healthcare Related Tasks in Preventing Zoonotic Diseases contains no evidence of efforts to involve the private sector in controlling or responding to zoonoses. [3] Private veterinarians and private animal healthcare laboratories are required by Law XLVI of 2008 on Food Chain and Regulatory Oversight (Law XLVI), article 53. (1) that in case they suspect a contagious disease to be present to take measures to control the spread and to report it to the authorities. [53 article-s] Decree No. 113/2008 of the Minister for Agriculture on the Mechanism of Reporting Animal Diseases, article 1. (2) a) clearly states that article 53 of Law XLVI refers to private veterinarians too. [4] There is no evidence for mechanisms for working with the private sector in controlling zoonoses on the sites of the Ministry of Human Capacities, the National Public Health and Medical Officer Service, the Ministry of Agriculture, the National Food Chain Security Office or the National Center for Public Health. [5] [6] [7] [8] [9]

[1] National Centre for Epidemiology (Országos Epidemiológiai Központ). "Organisational Structure" ("Szervezeti felépítés") [<http://www.oek.hu/oekfile.pl?fid=6457>]. Accessed 28 October 2020.

[2] National Food Chain Safety Agency (Nemzeti Élelmiszerlánc-biztonsági Hivatal). "Laboratory. Official." ("Laboratórium. Hivatali.") [<http://portal.nebih.gov.hu/hivatali>]. Accessed 28 October 2020.

[3] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Law XLVI of 2008 on Food Chain and Regulatory Oversight" ("2008. évi XLVI. törvény az élelmiszerláncról és hatósági felügyeletéről").

[<https://net.jogtar.hu/jogszabaly?docid=a0800046.tv>]. Accessed 28 October 2020.

[4] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree No. 113/2008 of the Minister for Agriculture on the Mechanism of Reporting Animal Diseases" ("113/2008. (VIII. 30.) FVM rendelet az állatbetegségek bejelentésének rendjéről") [<https://net.jogtar.hu/jogszabaly?docid=a0800113.fvm>]. Accessed 28 October 2020.

[5] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-minisztériuma>]. Accessed 28 October 2020.

[6] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). 2015. "Tasks and Operation of the National Public Health and Medical Officer Service" ("Az Állami Népegészségügyi és Tisztiorvosi Szolgálat feladatai és működése") [https://www.antsz.hu/felso_menu/rolunk]. Accessed 28 October 2020.

[7] Ministry of Agriculture (Agrárminisztérium). [<https://kormany.hu/agrarminisztérium>]. Accessed 28 October 2020.

[8] National Food Chain Security Office (Nemzeti Élelmiszerlánc-biztonsági Hivatal). "Animal Health and Animal Protection Directorate. Tasks." ("Állat-egészségügyi és Állatvédelmi Igazgatóság. Feladatok.") [<http://portal.nebih.gov.hu/allat-egeszsegugyi-es-allatvedelmi-igazgatosag>]. Accessed 28 October 2020.

[9] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>] Accessed 28 October 2020.

1.3 BIOSECURITY

1.3.1 Whole-of- government biosecurity systems

1.3.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is insufficient evidence that Hungary has a record in place of facilities handling especially dangerous pathogens and toxins. Although there is evidence of localized record keeping, there is insufficient evidence of record keeping at the national level. Per article 3(1) of the Government Decree No. 21/2013 on the Executing the Registration Obligations and on the Order of Control Deriving from the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, all entities that produce, develop, process, stockpile, use, import or export (even within the European Union) "any microbiological or other biological substance or toxin" must register at the Government Office (the lowest level of state administration, responsible for the execution of government decisions at the regional level). The Government Offices are responsible for maintaining records of the pathogens, but there is no mention of a national database or the frequency to which it is updated. [1] No further evidence is available through the Ministry of Human Capacities, the Ministry of Defence, the Ministry of Agriculture and the Ministry for Innovation and Technology. [2, 3, 4, 5] None of the Biological Weapon Convention Confidence Building Measures Reports (CBM Reports) is publicly available in case of Hungary. All Hungarian CBM Reports are submitted with restricted access only. [6] No list of notifiable pathogens is publicly available. The registrations are channelled to the Office of Military Technology and Export Control [7]. No evidence found of a record of facilities handling especially dangerous pathogens or toxins found on the Agricultural Ministry's website or the Verification Research, Training and Information Centre's database of legislation related to biological weapons and materials. [8] [9]

- [1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Government Decree No. 21/2013 on the Executing the Registration Obligations and on the Order of Control Deriving from the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction" (2013. (I. 30.) Korm. rendelet a bakteriológiai (biológiai) és toxin-fegyverek kifejlesztésének, előállításának, illátállításának, szállításának, raktározásának, megtiltásának, raktározásának és fegyverek megsemmisítéséről szóló 2013. évi XXXIII. egyezmény nyelvére eredő nyilatkozatteli kötelezettségek végrehajtásáról; és az ellenőrzés rendjéről). [https://net.jogtar.hu/jogszabaly?docid=A1300021.KOR]. Accessed 28 October 2020.
- [2] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [http://www.kormany.hu/hu/emberi-eroforrasok-miniszteriuma]. 28 October 2020.
- [3] Ministry of Defence (Honvédelmi Minisztérium). [http://www.kormany.hu/hu/honvedelmi-miniszterium]. Accessed 28 October 2020.
- [4] Ministry of Agriculture (Agrárminisztérium). [https://kormany.hu/agrarminiszterium]. Accessed 28 October 2020.
- [5] Ministry for Innovation and Technology (Innovációs és Technológiai Minisztérium). [http://www.kormany.hu/hu/innovacios-es-technologiai-miniszterium]. Accessed 28 October 2020.
- [6] The United Nations Office at Geneva. 2018. "Available Confidence Building Measures Reports: Hungary". [https://bwc-ecbm.unog.ch/state/hungary]. Accessed 28 October 2020.
- [7] Office of Military Technology and Export Control (Haditechnikai és Exportellenőrzési Hatóság). "Biological and Toxin Weapons Convention" (Biológiai és Toxin-fegyver Tilalmi Egyezmény). [http://mkeh.gov.hu/kereskedelmi/exportellenorzesi_osztaly/urlapok#top]. Accessed 28 October 2020.
- [8] Ministry of Agriculture (Agrárminisztérium). [https://kormany.hu/agrarminiszterium]. Accessed 28 October 2020.
- [9] Verification Research, Training and Information Centre. "BWC Legislation Database. H." [https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/h/]. Accessed 28 October 2020.

1.3.1b

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

Yes = 1, No = 0

Current Year Score: 1

Hungary has in place biosecurity legislation. Decree No. 61/1999 of the Minister for Health on the Health Protection of Workers Exposed to Biological Factors addresses requirements such as physical containment, operation practices, failure reporting systems of facilities in which especially dangerous pathogens and toxins are stored or processed. [1] Annex 4 establishes requirement for physical containment for biosafety levels 2, 3 and 4. [1] Annex 5 deals with operation practices for biosafety levels 2, 3 and 4. [1] Annex 6 outlines the failure reporting system. [1] None of Hungary's Biological Weapon Convention Confidence Building Measures Reports (CBM Reports) are publicly available, however. All Hungarian CBM Reports are submitted with restricted access only. [2]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree No. 61/1999 of the Minister for Health on the Health Protection of Workers Exposed to Biological Factors" ("61/1999. (XII. 1.) EüM rendelet a biológiai tényezők hatásának kitett munkavállalók egészségének védelméről") [https://net.jogtar.hu/jogszabaly?docid=99900061.eum]. Accessed 29 October 2020.

[2] The United Nations Office at Geneva. 2020. "Available Confidence Building Measures Reports: Hungary". [https://bwc-

ecbm.unog.ch/state/hungary]. Accessed 29 October 2020.

1.3.1c

Is there an established agency (or agencies) responsible for the enforcement of biosecurity legislation and regulations?

Yes = 1 , No = 0

Current Year Score: 1

Hungary has an agency responsible for the enforcement of biosecurity legislation and regulations. The Hungarian Labour Inspectorate is the agency responsible for the enforcement of biosecurity legislation, namely Decree No. 61/1999 of the Minister for Health on the Health Protection of Workers Exposed to Biological Factors. [1] This decree addresses requirements such as physical containment, operation practices, failure reporting systems of facilities in which especially dangerous pathogens and toxins are stored or processed. [2] None of Hungary's Biological Weapon Convention Confidence Building Measures Reports (CBM Reports) are publicly available, however. [3]

[1] Hungarian Labour Inspectorate (Munkavédelem Foglalkoztatás-felügyelet). "Legislation" ("Jogszabályok").

[http://www.ommf.gov.hu/index.php?akt_menu=532]. Accessed 29 October 2020.

[2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree No. 61/1999 of the Minister for Health on the Health Protection of Workers Exposed to Biological Factors" ("61/1999. (XII. 1.) EüM rendelet a biológiai tényezők hatásának kitett munkavállalók egészségének védelméről") [https://net.jogtar.hu/jogszabaly?docid=99900061.eum]. Accessed 29 October 2020.

[3] The United Nations Office at Geneva. 2020. "Available Confidence Building Measures Reports: Hungary". [https://bwc-ecbm.unog.ch/state/hungary]. Accessed 29 October 2020.

1.3.1d

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


Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Hungary has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities. There is no such evidence on the Ministry of Defence's website, or on the central government website. [1, 2] The Office of Military Technology and Export Control has no information. [3] Human and animal health agencies do not provide such data, nor do their laboratories. [4, 5, 6, 7] The Department of Microbiological Reference Laboratory operates a BSL-4 laboratory (BSL-4 is the highest level of biosafety precautions) and other, smaller laboratories: 19 reference laboratories and 3 World Health Organization Reference Laboratories but it does not talk about the biosecurity aspect. [5] The issue is not within the scope of the research agency. [8] Government Decree No. 21/2013 on the Executing the Registration Obligations and on the Order of Control Deriving from the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction does not indicate that Hungary has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities. [9] None of Hungary's Biological Weapon Convention Confidence Building Measures Reports (CBM Reports) are publicly available. [10] No public evidence found that would show that the country has taken action to consolidate its inventories of especially dangerous pathogens and toxins into a minimum number of facilities in the Verification Research, Training and Information Centre's database of legislation related to biological weapons and materials. [11]

- [1] Ministry of Defence (Honvédelmi Minisztérium). [<https://kormany.hu/honvedelmi-miniszterium>]. Accessed 29 October 2020.
- [2] Government of Hungary (Magyarország Kormánya). [<http://www.kormany.hu/>]. Accessed 29 October 2020.
- [3] Office of Military Technology and Export Control (Haditechnikai és Exportellenőrzési Hatóság). 2020. "Export Control Unit" ("Exportellenőrzési Osztály"). [http://mkeh.gov.hu/kereskedelmi/exportellenorzesi_osztaly]. Accessed 29 October 2020.
- [4] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). 2015. "Tasks and Operation of the National Public Health and Medical Officer Service" ("Az Állami Népegészségügyi és Tisztiorvosi Szolgálat feladatai és működése") [https://www.antsz.hu/felso_menu/rolunk]. Accessed 29 October 2020.
- [5] National Center for Public Health (Nemzeti Népegészségügyi Központ). "Department of Microbiological Reference Laboratory". ("Mikrobiológiai Referencia Laboratóriumi Főosztály"). [<https://www.nnk.gov.hu/index.php/mikrobiologiai-referencia-laboratoriumi-foosztaly/mikrobiologiai-referencia-laboratoriumi-foosztaly-kezdolapja>]. Accessed 29 October 2020.
- [6] National Food Chain Security Office (Nemzeti Élelmiszerlánc-biztonsági Hivatal). "Animal Health and Animal Protection Directorate. Tasks." ("Állat-egészségügyi és Állatvédelmi Igazgatóság. Feladatok."). [<http://portal.nebih.gov.hu/allat-egeszsegugyi-es-allatvedelmi-igazgatosag>]. 29 October 2020.
- [7] National Centre for Epidemiology (Országos Epidemiológiai Központ). 2011. "Information on Submitting Samples" ("Minta beküldésével kapcsolatos információk"). [<http://www.oek.hu/oek.web?to=1145&nid=315&pid=1&lang=hun>]. 29 October 2020.
- [8] National Research, Development and Innovation Office (Nemzeti Kutatási, Fejlesztési és Innovációs Hivatal). "About the Office" (NKFI Hivatalról)[<https://nkfi.gov.hu/hivatalrol>]. Accessed 29 October 2020.
- [9] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Government Decree No. 21/2013 on the Executing the Registration Obligations and on the Order of Control Deriving from the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction" ("21/2013. (I. 30.) Korm. rendelet a bakteriológiai (biológiai) és toxin-fegyverek kifejlesztésének, előállításának és tárolásának megtiltásáról és e fegyverek megsemmisítéséről szóló egyezményből eredő nyilatkozattételi kötelezettségek végrehajtásáról és az ellenőrzés rendjéről") [<https://net.jogtar.hu/jogszabaly?docid=A1300021.KOR>]. Accessed 29 October 2020.
- [10] The United Nations Office at Geneva. 2020. "Available Confidence Building Measures Reports: Hungary". [<https://bwcecbm.unog.ch/state/hungary>]. Accessed 29 October 2020.
- [11] Verification Research, Training and Information Centre. "BWC Legislation Database. H." [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/h/>]. 28 October 2020.

1.3.1e

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

Yes = 1, No = 0

Current Year Score: 1

Hungary has in-country capacity to conduct polymerase chain reaction (PCR) diagnostic testing for Ebola without culturing a live pathogen, but there is no evidence of such capacity for anthrax. The National Centre for Epidemiology (NCE) runs viral tests with PCR method. [1] A recent scientific study presents the results of PCR testing on the Ebola virus; all work with the virus was performed at the National Public Health Institute, National Biosafety Laboratory in Hungary under biosafety level 4 (BSL-4) conditions [2]. BSL-4 is the highest level of biosafety precautions, and it is appropriate for work with agents that could easily be aerosol-transmitted within the laboratory and cause severe to fatal disease in humans for which there are no available vaccines or treatments. Anthrax is tested in the National Reference Laboratory at NCE. [3] There is no public evidence of in-country capacity in Hungary to conduct PCR-based diagnostic testing for anthrax. [3]

- [1] National Center for Epidemiology (Országos Epidemiológiai Központ). "Viral Tests" ("Virologiai vizsgálatok"). [<http://www.oek.hu/oek.web?nid=718&pid=1>]. Accessed 29 October 2020.
- [2] Palyi, Bernadett, et. al. 2018. Determining the effect of different environmental conditions on Ebola virus viability in clinically relevant specimens. *Emerging Microbes & Infections*. Vol. 52
- [7] [<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5874241/>]. Accessed 29 October 2020.
- [3] National Centre for Epidemiology (Országos Epidemiológiai Központ). "Submitting Samples" ("Mintabeküldés"). [<http://oek.hu/oek.web?to=1145&nid=315&pid=1&lang=hun>]. Accessed 29 October 2020.

1.3.2 Biosecurity training and practices

1.3.2a

Does the country require biosecurity training, using a standardized, required approach, such as through a common curriculum or a train-the-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 evidence of a standardized approach to biosecurity training. There is no such evidence on the Ministry of Defence's website, or on the central government website. [1, 2] Agricultural and research agencies do not provide such data. [3, 4] Workers exposed to high-consequence biological materials receive extra training on health risks, preventing exposure, hygiene, personal protection, emergency plans and preventing emergencies as per article 9 of Decree No. 61/1999 of the Minister for Health on the Health Protection of Workers Exposed to Biological Factors. [5] Apart from these broad training segments and a requirement that the training be documented, there are no further details on its content, however. [1, 5] There is no standardized approach such as a common curriculum or a train-the-trainer programme, either. [6] None of Hungary's Biological Weapon Convention Confidence Building Measures Reports (CBM Reports) is publicly available. [7] No public evidence found showing that the country requires a standardized biosecurity training in the Verification Research, Training and Information Centre's database of legislation related to biological weapons and materials. [8]

- [1] Ministry of Defence (Honvédelmi Minisztérium). [<https://kormany.hu/honvedelmi-minisztorium>]. Accessed 29 October 2020.
- [2] Government of Hungary (Magyarország Kormánya). [<http://www.kormany.hu/>]. Accessed 29 October 2020.
- [3] National Food Chain Security Office (Nemzeti Élelmiszerlánc-biztonsági Hivatal). "Laboratories" ("Laboratóriumok"). [<http://portal.nebih.gov.hu/kapcsolat/laboratoriumok/nebih-laboratoriumok>]. Accessed 29 October 2020.
- [4] National Research, Development and Innovation Office (Nemzeti Kutatási, Fejlesztési és Innovációs Hivatal). "About the Office" ("NKFI Hivatalról"). [<https://nkfi.gov.hu/hivatalrol>]. Accessed 29 October 2020.
- [5] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree No. 61/1999 of the Minister for Health on the Health Protection of Workers Exposed to Biological Factors" ("61/1999. (XII. 1.) EüM rendelet a biológiai tényezők hatásának kitett munkavállalók egészségének védelméről"). [<https://net.jogtar.hu/jogszabaly?docid=99900061.eum>]. Accessed 29 October 2020.
- [6] Hungarian Labor Inspectorate (Munkavédelem Foglalkoztatás-felügyelet). "Legislation" ("Jogszabályok"). [http://www.ommf.gov.hu/index.php?akt_menu=532]. Accessed 28 October 2020.
- [7] The United Nations Office at Geneva. 2020. "Available Confidence Building Measures Reports: Hungary". [<https://bwc-ecbm.unog.ch/state/hungary>]. Accessed 28 October 2020.
- [8] Verification Research, Training and Information Centre. "BWC Legislation Database. H." [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/h/>]. 28 October 2020.

1.3.3 Personnel vetting: regulating access to sensitive locations

1.3.3a

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

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

Current Year Score: 1

Regulations specify that personnel with access to especially dangerous pathogens, toxins, or biological materials with pandemic potential are subject to psychological or mental fitness checks. Employees in facilities handling high-consequence biological materials are required to have periodic medical checks, as per Article 13-14 of Decree No. 61/1999 of the Minister for Health on the Health Protection of Workers Exposed to Biological Factors. [1] Article 6 (c) of Decree No. 33/1998 of the Minister for Public Health on Work, Profession and Personal Hygienic Medical Fitness Checks and on their Consultation states that personnel with access to dangerous physical, chemical or biological materials must have periodical medical and psychological checks. They are further required to have psychological checks following incidents, as per Article 7 of Decree No. 33/1998 of the Minister for Public Health on Work, Profession and Personal Hygienic Medical Fitness Checks and on their Consultation. [2] There are special provisions on keeping employees' medical records; these are kept for a longer period to allow for potential analyses later. However, there is no evidence on any special background checks or drug tests conducted before taking up employment. [2] There is no evidence of a requirement for background checks or drug tests in either of the aforementioned regulations, on the websites of the Ministry of Defence, National Public Health and Medical Officer Service, National Center for Public Health, National Center for Epidemiology or National Research, Development and Innovation Office, or in the Verification Research, Training and Information Centre's database of legislation related to biological weapons and materials. [1][2][3][4][5][6][7][8] None of Hungary's Biological Weapon Convention Confidence Building Measures Reports (CBM Reports) are publicly available. [9]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree No. 61/1999 of the Minister for Health on the Health Protection of Workers Exposed to Biological Factors" ("61/1999. (XII. 1.) EüM rendelet a biológiai tényezők hatásának kitett munkavállalók egészségének védelméről") [<https://net.jogtar.hu/jogszabaly?docid=99900061.eum>]. Accessed 29 October 2020.

[2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree No. 33/1998 of the Minister for Public Health on Work, Profession and Personal Hygienic Medical Fitness Checks and on their Consultation" ("33/1998. (VI. 24.) NM rendelet a munkaköri, szakmai, illetve személyi higiénés alkalmasság orvosi vizsgálatáról és véleményezéséről"). [<https://net.jogtar.hu/jogszabaly?docid=99800033.NM>]. Accessed 29 October 2020.

[3] Ministry of Defence (Honvédelmi Minisztérium). [<https://kormany.hu/honvedelmi-minisztterium>]. Accessed 29 October 2020.

[4] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). 2015. "Tasks and Operation of the National Public Health and Medical Officer Service" ("Az Állami Népegészségügyi és Tisztiorvosi Szolgálat feladatai és működése") [https://www.antsz.hu/felso_menu/rolunk]. Accessed 29 October 2020.

[5] National Center for Public Health (Nemzeti Népegészségügyi Központ). "Department of Microbiological Reference Laboratory". ("Mikrobiológiai Referencia Laboratóriumi Főosztály"). [<https://www.nnk.gov.hu/index.php/mikrobiologiai-referencia-laboratoriumi-foosztaly/mikrobiologiai-referencia-laboratoriumi-foosztaly-kezdolapja>]. Accessed 29 October 2020.

[6] National Center for Epidemiology (Országos Epidemiológiai Központ). 2011. "Information on Submitting Samples" ("Minta beküldésével kapcsolatos információk"). [<http://www.oek.hu/oek.web?to=1145&nid=315&pid=1&lang=hun>]. 29 October 2020.

[7] National Research, Development and Innovation Office (Nemzeti Kutatási, Fejlesztési és Innovációs Hivatal). "About the

Office" (NKFI Hivatalról[<https://nkfi.gov.hu/hivatalrol>]. Accessed 29 October 2020.

[8] Verification Research, Training and Information Centre. "BWC Legislation Database. H."

[<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/h/>]. 28 October 2020.

[9] United Nations Office at Geneva. 2020. "Available Confidence Building Measures Reports: Hungary". [<https://bwc-ecbm.unog.ch/state/hungary>]. Accessed 29 October 2020.

1.3.4 Transportation security

1.3.4a

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

Yes = 1 , No = 0

Current Year Score: 1

Hungary has national regulation on the safe and secure transport of infectious substances (Categories A and B). The country has implemented Annexes A and B of the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) internationally and nationally, which cover Category A and Category B infectious substances. [1] There is some information on the safe and secure transportation of infectious substances on the website of a fire and disaster management library called VÉDELEM reflecting on nationally implemented ADR regulations. [2] UPS, a private shipping company, also has information on the conditions of shipping category B biological substances and category A pandemic substances, which is also based on nationally implemented ADR regulations. [3, 4] UPS also has specific information on the conditions of shipping category B biological substances by air under the arrangements of the International Air Transport Association. [3] None of Hungary's Biological Weapon Convention Confidence Building Measures Reports (CBM Reports) are publicly available. [5]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Government Decree No. 178/2017 on the Implementing Annex A and B of the European Agreement concerning the International Carriage of Dangerous Goods and on Certain Issues of its National Inland Application" ("178/2017. (VII. 5.) Korm. rendelet a Veszélyes Áruk Nemzetközi Közúti Szállításáról szóló Európai Megállapodás „A” és „B” Melléklete kihirdetéséről, valamint a belföldi alkalmazásának egyes kérdéseiről"). [<https://net.jogtar.hu/jogszabaly?docid=a1700178.kor>]. Accessed 29 October 2020.

[2] VÉDELEM Online. Fire and Disaster Management Library (VÉDELEM Online Tűz- és katasztrófavédelmi szakkönyvtár). "Biological Risks on the Road: What can be discovered?" ("Biológiai veszélyek a közúton – Mit lehet felderíteni?").

[<http://www.vedelem.hu/letoltes/anyagok/473-biologiai-veszelyek-a-kozuton-mit-lehet-felderiteni.pdf>]. Accessed 29 October 2020.

[3] UPS. "Global Shipment of Dangerous Goods" ("Veszélyes áruk globális szállítása"). [<https://www.ups.com/hu/hu/help-center/packaging-and-supplies/special-care-shipments/global-dangerous-goods.page>]. Accessed 29 October 2020.

[4] UPS. "Processing shipment of category A pandemic substances ("A kategóriájú fertőző anyag szállítmány feldolgozása"). [https://www.ups.com/worldshiphelp/WS18/HUN/AppHelp/Process_Infectious_Substance_Category_A_Shipment.htm]. Accessed 29 October 2020.

[5] The United Nations Office at Geneva. 2020. "Available Confidence Building Measures Reports: Hungary". [<https://bwc-ecbm.unog.ch/state/hungary>]. Accessed 29 October 2020.

1.3.5 Cross-border transfer and end-user screening

1.3.5a

Is there legislation and/or regulations in place to oversee the cross-border transfer and end-user screening of especially dangerous pathogens, toxins, and pathogens with pandemic potential?

Yes = 1, No = 0

Current Year Score: 1

Hungary has a regulation in place to oversee the cross-border transfer and end-user screening of especially dangerous pathogens. According to Article 3(1) of the Government Decree No. 21/2013 on the Executing the Registration Obligations and on the Order of Control Deriving from the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, all entities that produce, develop, process, stockpile, use, import or export (even within the European Union) "any microbiological or other biological substance or toxin" must register at the Government Office (the lowest level of state administration, responsible for the execution of decisions at the regional level). [1] The registrations, including export, import and end-user information, are channelled to the Office of Military Technology and Export Control. [2] None of Hungary's Biological Weapon Convention Confidence Building Measures Reports (CBM Reports) are publicly available. [3] Further, End-user screening is mandated by the EU's Regulation No 428/2009 Setting up a Community Regime for the Control of Exports, Transfer, Brokering and Transit of Dual-Use Items. Regulations issued by the European Council are legally binding legislative acts in all EU member states, including Hungary. [4]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2018. "Government Decree No. 21/2013 on the Executing the Registration Obligations and on the Order of Control Deriving from the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction" ("21/2013. (I. 30.) Korm. rendelet a bakteriológiai (biológiai) és toxin-fegyverek kifejlesztésének, előállításának és tárolásának megtiltásáról és e fegyverek megsemmisítéséről szóló egyezményből eredő nyilatkozattételi kötelezettségek végrehajtásáról és az ellenőrzés rendjéről") [<https://net.jogtar.hu/jogszabaly?docid=A1300021.KOR>]. Accessed 29 October 2020.

[2] Office of Military Technology and Export Control (Haditechnikai és Exportellenőrzési Hatóság). "Biological and Toxin Weapons Convention" ("Biológiai és Toxin-fegyver Tilalmi Egyezmény"). [http://mkeh.gov.hu/kereskedelmi/exportellenorzesi_osztaly/urlapok#top]. Accessed 29 October 2020.

[3] The United Nations Office at Geneva. 2020. "Available Confidence Building Measures Reports: Hungary". [<https://bwc-ecbm.unog.ch/state/hungary>]. Accessed 29 October 2020.

[4] European Council. Council Regulation (EC) No 428/2009 of 5 May 2009. "Setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items." [<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02009R0428-20191231>]. Accessed 5 August 2020.

1.4 BIOSAFETY

1.4.1 Whole-of-government biosafety systems

1.4.1a

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

Yes = 1, No = 0

Current Year Score: 1

Hungary has national biosafety legislation in place. [1] Decree No. 61/1999 of the Minister for Health on the Health Protection of Workers Exposed to Biological Factors establishes safeguards to protect people who work with biological

substances. It regulates ordinary, i.e. annual and extraordinary risk assessments of employees' safety and health, the duties of employees, obligatory notifications and registrations of the employer with governmental authorities concerning injuries, accidents, incidents, and employee safety data, among other things. [1] It also regulates security levels, based on a list of agents and toxins, establishing special employee safety rules and measures. None of Hungary's Biological Weapon Convention Confidence Building Measures Reports (CBM Reports) are publicly available. [2]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree No. 61/1999 of the Minister for Health on the Health Protection of Workers Exposed to Biological Factors" ("61/1999. (XII. 1.) EüM rendelet a biológiai tényezők hatásának kitett munkavállalók egészségének védelméről") [<https://net.jogtar.hu/jogszabaly?docid=99900061.eum>]. Accessed 29 October 2020.

[2] United Nations Office at Geneva. 2020. "Available Confidence Building Measures Reports: Hungary". [<https://bwc-ecbm.unog.ch/state/hungary>]. Accessed 29 October 2020.

1.4.1b

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

Yes = 1 , No = 0

Current Year Score: 1

Hungary has an agency responsible for the enforcement of biosafety legislation. According to article 3(4) of Decree No. 61/1999 of the Minister for Health on the Health Protection of Workers Exposed to Biological Factors, labor safety authorities governed by the Hungarian Labor Inspectorate are responsible for enforcing the biosafety-related legal framework focusing on protecting the people working with high-consequence substances. [1] None of Hungary's Biological Weapon Convention Confidence Building Measures Reports (CBM Reports) are publicly available. [2]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2018. "Decree No. 61/1999 of the Minister for Health on the Health Protection of Workers Exposed to Biological Factors" ("61/1999. (XII. 1.) EüM rendelet a biológiai tényezők hatásának kitett munkavállalók egészségének védelméről") [<https://net.jogtar.hu/jogszabaly?docid=99900061.eum>]. Accessed 29 October 2020.

[2] United Nations Office at Geneva. 2020. "Available Confidence Building Measures Reports: Hungary". [<https://bwc-ecbm.unog.ch/state/hungary>]. Accessed 29 October 2020.

1.4.2 Biosafety training and practices

1.4.2a

Does the country require biosafety training, using a standardized, required approach, such as through a common curriculum or a train-the-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 evidence of a standardized approach to biosafety training. Health, agricultural and research agencies do not have information pertaining to standardized biosafety training on their websites. [1, 2, 3, 4] Workers exposed to high-consequence biological materials are required to receive training on health risks, preventing exposure, hygiene, personal protection, emergency plans and preventing emergencies, as per article 9 of Decree No. 61/1999 of the Minister for Health on the Health Protection of Workers Exposed to Biological Factors. [5] No detailed training requirements are available, however, nor

is there evidence of a standardized approach such as a common curriculum or a train-the-trainer programme. [5, 6] None of Hungary's Biological Weapon Convention Confidence Building Measures Reports (CBM Reports) are publicly available. [7] There are no further relevant documents in the Verification Research, Training and Information Centre's database. [8]

- [1] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). 2015. "Tasks and Operation of the National Public Health and Medical Officer Service" ("Az Állami Népegészségügyi és Tisztiorvosi Szolgálat feladatai és működése") [https://www.antsz.hu/felso_menu/rolunk]. Accessed 29 October 2020.
- [2] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>]. Accessed 29 October 2020.
- [3] National Food Chain Security Office (Nemzeti Élelmiszerlánc-biztonsági Hivatal). "Laboratories" ("Laboratóriumok"). [<http://portal.nebih.gov.hu/kapcsolat/laboratoriumok/nebih-laboratoriumok>]. Accessed 29 October 2020.
- [4] National Research, Development and Innovation Office (Nemzeti Kutatási, Fejlesztési és Innovációs Hivatal). "About the Office" ("NKFI Hivatalról"). [<https://nkfi.gov.hu/hivatalrol>]. Accessed 29 October 2020.
- [5] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree No. 61/1999 of the Minister for Health on the Health Protection of Workers Exposed to Biological Factors" ("61/1999. (XII. 1.) EüM rendelet a biológiai tényezők hatásának kitett munkavállalók egészségének védelméről"). [<https://net.jogtar.hu/jogszabaly?docid=99900061.eum>]. Accessed 29 October 2020.
- [6] Hungarian Labor Inspectorate (Munkavédelem Foglalkoztatás-felügyelet). "Legislation" ("Jogszabályok"). [http://www.ommf.gov.hu/index.php?akt_menu=532]. Accessed 29 October 2020.
- [7] The United Nations Office at Geneva. 2020. "Available Confidence Building Measures Reports: Hungary". [<https://bwc-ecbm.unog.ch/state/hungary>]. Accessed 29 October 2020.
- [8] Verification Research, Training and Information Centre. "BWC Legislation Database. H." [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/h/>]. 24 November 2020.

1.5 DUAL-USE RESEARCH AND CULTURE OF RESPONSIBLE SCIENCE

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

1.5.1a

Is there publicly available evidence that the country has conducted an assessment to determine whether ongoing research is occurring on especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research?

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that Hungary has conducted an assessment to determine whether ongoing research is occurring on especially dangerous pathogens, toxins, pathogens with pandemic potential, or other dual use research. Neither the Ministry of Defence nor the government have relevant information on their websites. [1, 2] Human and animal health agencies do not provide relevant data, either, and the issue is not within the scope of the research agency. [3, 4, 5, 6] Per article 3(1) of the Government Decree No. 21/2013 on Executing the Registration Obligations and on the Order of Control Deriving from the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, all entities which produce, develop, process, stockpile, use, import or export (even within the European Union) "any microbiological or other biological substance or toxin" must register at the Government Office (the lowest level of state administration, responsible for the execution of decisions at the regional level). [7] The registrations are channelled to the Office of Military Technology and Export Control. [8] The Office gathers information on biological substances and toxins but does not, according to publicly available material, assess ongoing

research. None of Hungary's Biological Weapon Convention Confidence Building Measures Reports (CBM Reports) are publicly available. [9] There are no further relevant documents in the Verification Research, Training and Information Centre's database. [10]

- [1] Ministry of Defence (Honvédelmi Minisztérium). [<https://kormany.hu/honvedelmi-miniszterium>]. Accessed 29 October 2020.
- [2] Government of Hungary (Magyarország Kormány). [<http://www.kormany.hu/>]. Accessed 29 October 2020.
- [3] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>]. Accessed 29 October 2020.
- [4] National Public Health and Medical Officer Service (Nemzeti Népegészségügyi és Tisztiorvosi Szolgálat). 2015. Tasks and Operation of the National Public Health and Medical Officer Service (Nemzeti Népegészségügyi és Tisztiorvosi Szolgálat feladatai és működése) [https://www.antsz.hu/felso_menu/rolunk]. Accessed 29 October 2020.
- [5] National Food Chain Security Office (Nemzeti Élelmiszerlánc-biztonsági Hivatal). Animal Health and Animal Protection Directorate. Tasks (Nemzeti Élelmiszerlánc-biztonsági Hivatal Állat-egészségügyi és Állatvédelmi Igazgatóság. Feladatok). [<http://portal.nebih.gov.hu/allat-egeszsegugyi-es-allatvedelmi-igazgatosag>]. Accessed 29 October 2020.
- [6] National Research, Development and Innovation Office (Nemzeti Kutatási, Fejlesztési és Innovációs Hivatal). About the Office (NKFI Hivatalról) [<https://nkfi.gov.hu/hivatalrol>]. Accessed 29 October 2020.
- [7] Catalogue of National Legislations (Jogtar) of Wolters Kluwer Ltd. 2020. Government Decree No. 21/2013 on Executing the Registration Obligations and on the Order of Control Deriving from the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (2013. (I. 30.) Korm. rendelet a bakteriológiai (biológiai) és toxin-fegyverek kifejlesztésének, előállításának, szállításának, forgalmazásának megtiltásáról és a fegyverek megsemmisítéséről szóló egyezményben foglalt elkötelezettségek végrehajtásáról és az ellenőrzés rendjéről). [<https://net.jogtar.hu/jogszabaly?docid=A1300021.KOR>]. Accessed 29 October 2020.
- [8] Office of Military Technology and Export Control (Haditechnikai és Exportellenőrzési Hatóság). Biological and Toxin Weapons Convention (Biológiai és Toxin-fegyver Tilalmi Egyezmény). [http://mkeh.gov.hu/kereskedelmi/exportellenorzesi_osztaly/urlapok#top]. Accessed 29 October 2020.
- [9] The United Nations Office at Geneva. 2020. Available Confidence Building Measures Reports: Hungary. [<https://bwc-ecbm.unog.ch/state/hungary>]. Accessed 29 October 2020.
- [10] Verification Research, Training and Information Centre. "BWC Legislation Database. H." [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/h/>]. Accessed 24 November 2020.

1.5.1b

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Hungary has a national policy requiring oversight of dual use research, such as research with especially dangerous pathogens, toxins, or pathogens with pandemic potential. There is no evidence of such a policy on the website of the Ministry of Defence or on the central government website. [1, 2] Human and animal health agencies do not

provide relevant data. [3, 4, 5] The issue is not within the scope of the research agency. [6] Law LXXVI of 2014 on Scientific Research, Development and Innovation does not establish such an obligation. [7] However, per Article 3(1) of the Government Decree No. 21/2013 on the Executing the Registration Obligations and on the Order of Control Deriving from the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, all entities which produce, develop, process, stockpile, use, import or export (even within the European Union) 'any microbiological or other biological substance or toxin' must register at the Government Office (the lowest level of state administration, responsible for the execution of decisions at the regional level). [8] The registrations are channelled to the Office of Military Technology and Export Control. [9] The Office gathers information on biological substances and toxins but does not oversee research. The Medical Research Council has recommended the adoption of a Code of Bioethics for biomedical research. [10] None of Hungary's Biological Weapon Convention Confidence Building Measures Reports (CBM Reports) are publicly available. [11] There is no public evidence that legislation exists requiring oversight of research with especially dangerous pathogens, toxins, pathogens with pandemic potential and/or other dual-use research on the website of the Ministry of Agriculture or in the Verification Research, Training and Information Centre's database of legislation related to biological weapons and materials. [12] [13]

[1] Ministry of Defence (Honvédelmi Minisztérium). [<https://kormany.hu/honvedelmi-minisztorium>]. Accessed 29 October 2020.

[2] Government of Hungary (Magyarország Kormánya). [<http://www.kormany.hu/>]. Accessed 29 October 2020.

[3] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>]. Accessed 29 October 2020.

[4] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). 2015. "Tasks and Operation of the National Public Health and Medical Officer Service" ("Az Állami Népegészségügyi és Tisztiorvosi Szolgálat feladatai és működése") [https://www.antsz.hu/felso_menu/rolunk]. Accessed 29 October 2020.

[5] National Food Chain Security Office (Nemzeti Élelmiszerlánc-biztonsági Hivatal). "Animal Health and Animal Protection Directorate. Tasks." ("Állat-egészségügyi és Állatvédelmi Igazgatóság. Feladatok."). [<http://portal.nebih.gov.hu/allat-egeszsegugyi-es-allatvedelmi-igazgatosag>]. Accessed 29 October 2020.

[6] National Research, Development and Innovation Office (Nemzeti Kutatási, Fejlesztési és Innovációs Hivatal). "About the Office". ("NKFI Hivatalról") [<https://nkfi.gov.hu/hivatalrol>]. Accessed 29 October 2020.

[7] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Law LXXVI of 2014 on Scientific Research, Development and Innovation" ("2014. évi LXXVI. törvény a tudományos kutatásról, fejlesztésről és innovációról"). [<https://net.jogtar.hu/jogszabaly?docid=A1400076.TV>]. Accessed 29 October 2020.

[8] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Government Decree No. 21/2013 on the Executing the Registration Obligations and on the Order of Control Deriving from the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction" ("21/2013. (I. 30.) Korm. rendelet a bakteriológiai (biológiai) és toxin-fegyverek kifejlesztésének, előállításának és tárolásának megtiltásáról és e fegyverek megsemmisítéséről szóló egyezményből eredő nyilatkozattételi kötelezettségek végrehajtásáról és az ellenőrzés rendjéről") [<https://net.jogtar.hu/jogszabaly?docid=A1300021.KOR>]. Accessed 29 October 2020.

[9] Office of Military Technology and Export Control (Haditechnikai és Exportellenőrzési Hatóság). 2013. "Biological and Toxin Weapons Convention" ("Biológiai és Toxin-fegyver Tilalmi Egyezmény"). [http://mkeh.gov.hu/kereskedelmi/exportellenorzesi_osztaly/urlapok#top Accessed 29 October 2020.

[10] Medical Research Council (Egészségügyi Tudományos Tanács). "Code of Bioethics" ("Bioetikai Kódex"). [<https://ett.aek.hu/bioetikai-kodex/>]. Accessed 29 October 2020.

[11] The United Nations Office at Geneva. 2020. "Available Confidence Building Measures Reports: Hungary". [<https://bwcecbm.unog.ch/state/hungary>]. Accessed 29 October 2020.

[12] Ministry of Agriculture (Agrárminisztérium). [<https://kormany.hu/agrarminiszterium>]. Accessed 28 October 2020.

[13] Verification Research, Training and Information Centre. "BWC Legislation Database. H."

[<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/h/>]. 28 October 2020

1.5.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of an agency responsible for oversight of research with especially dangerous pathogens, pathogens with pandemic potential, or other dual use research. There is no evidence of such an agency on the website of the Ministry of Defence or on the central government website. [1, 2] Human and animal health agencies do not provide relevant data. [3, 4, 5] The issue is not within the scope of the research agency. [6] However, per Article 3(1) of the Government Decree No. 21/2013 on Executing the Registration Obligations and on the Order of Control Deriving from the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, all entities that produce, develop, process, stockpile, use, import or export (even within the European Union) "any microbiological or other biological substance or toxin" must register at the Government Office (the lowest level of state administration, responsible for the execution of decisions at the regional level). [7] The registrations are channelled to the Office of Military Technology and Export Control. [8] The Office gathers information on biological substances and toxins but does not oversee research. None of Hungary's Biological Weapon Convention Confidence Building Measures Reports (CBM Reports) are publicly available. [9] There is no evidence of an agency responsible for oversight of research with especially dangerous pathogens on the website of the Ministry of Agriculture or in the Verification Research, Training and Information Centre's database of legislation related to biological weapons and materials. [10] [11]

[1] Ministry of Defence (Honvédelmi Minisztérium). [<https://kormany.hu/honvedelmi-minisztorium>]. Accessed 29 October 2020.

[2] Government of Hungary (Magyarország Kormánya). [<http://www.kormany.hu/>]. Accessed 29 October 2020.

[3] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>]. Accessed 29 October 2020.

[4] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). 2015. "Tasks and Operation of the National Public Health and Medical Officer Service" ("Az Állami Népegészségügyi és Tisztiorvosi Szolgálat feladatai és működése") [https://www.antsz.hu/felso_menu/rolunk]. Accessed 29 October 2020.

[5] National Food Chain Security Office (Nemzeti Élelmiszerlánc-biztonsági Hivatal). "Animal Health and Animal Protection Directorate. Tasks." ("Állat-egészségügyi és Állatvédelmi Igazgatóság. Feladatok."). [<http://portal.nebih.gov.hu/allat-egeszsegugyi-es-allatvedelmi-igazgatosag>]. Accessed 29 October 2020.

[6] National Research, Development and Innovation Office (Nemzeti Kutatási, Fejlesztési és Innovációs Hivatal). "About the Office". ("NKFI Hivatalról") [<https://nkfi.gov.hu/hivatalrol>]. Accessed 29 October 2020.

[7] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Government Decree No. 21/2013 on the Executing the Registration Obligations and on the Order of Control Deriving from the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction" ("21/2013. (I. 30.) Korm. rendelet a bakteriológiai (biológiai) és toxin-fegyverek kifejlesztésének, előállításának és tárolásának megtiltásáról és e fegyverek megsemmisítéséről szóló egyezményből eredő nyilatkozattételi kötelezettségek végrehajtásáról és az ellenőrzés rendjéről"). [<https://net.jogtar.hu/jogszabaly?docid=A1300021.KOR>]. Accessed 29 October 2020.

[8] Office of Military Technology and Export Control (Haditechnikai és Exportellenőrzési Hatóság). 2013. "Biological and Toxin Weapons Convention" ("Biológiai és Toxin-fegyver Tilalmi Egyezmény").

[<http://mkeh.gov.hu/kereskedelmi/exportellenorzesi-osztaly/urlapok#top>]. Accessed 29 October 2020.

[9] The United Nations Office at Geneva. 2020. "Available Confidence Building Measures Reports: Hungary". [<https://bwc->

ecbm.unog.ch/state/hungary]. Accessed 29 October 2020.

[10] Ministry of Agriculture (Agrárminisztérium). [<https://kormany.hu/agrarminiszterium>]. Accessed 28 October 2020.

[11] Verification Research, Training and Information Centre. "BWC Legislation Database. H."

[<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/h/>]. 28 October 2020

1.5.2 Screening guidance for providers of genetic material

1.5.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence that Hungary has legislation or regulations requiring the screening of synthesized DNA against lists of known pathogens and toxins before it is sold. While genetically modified organism (GMO) legislation in Hungary requires that synthesized DNA be screened before market entry, the laws do not mention screening of synthesized DNA against lists of known pathogens and toxins. [1] As per article 2(n) of the Law XXVII of 1998 on Gene Technology Activities, GMO products are genetically modified organisms, combinations or processed substances thereof that enter the market. [1] All GMO products need to be authorized to enter the market. The product must be tested for environmental and biological effects, but there is no mention of screening against a list of pathogens. If there are doubts about the validity of previous test results from another European Union member state, the tests may be repeated, meaning that there is no mutual recognition of results, as per article 8(2)c of Law XXVII of 1998 on Gene Technology Activities. [1] No genetically modified organism is authorized if it contains genes for resistance against antibiotics used in human or animal health treatments, or if it poses risks to human health or the environment, as per article 7(4) of Law XXVII of 1998 on Gene Technology Activities. [1] None of Hungary's Biological Weapon Convention Confidence Building Measures Reports (CBM Reports) are publicly available. [2] There is no publicly available evidence that Hungary has legislation or regulations requiring the screening of synthesized DNA against lists of known pathogens and toxins before it is sold on the websites of the Deputy State Secretariat for Transport Authority, Ministry of Human Capacities, Ministry of Defence, Ministry of Agriculture, National Centre for Epidemiology, National Center for Public Health, National Public Health and Medical Officer Service, National Research, Development and Innovation Office or in the Verification Research, Training and Information Centre's database of legislation related to biological weapons and materials. [3] [4] [5] [6] [7] [8] [9] [10] [11]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Law XXVII of 1998 on Gene Technology Activities" ("1998. évi XXVII. törvény a géntechnológiai tevékenységről"), [<https://net.jogtar.hu/jogszabaly?docid=99800027.tv>].

Accessed 29 October 2020.

[2] The United Nations Office at Geneva. 2020. "Available Confidence Building Measures Reports: Hungary". [<https://bwc-ecbm.unog.ch/state/hungary>]. Accessed 28 October 2020.

[3] Deputy State Secretariat for Transport Authority, Ministry of Innovation and Technology. (Innovációs és Technológiai Minisztérium Közlekedési Hatósági Ügyekért Felelős Helyettes Államtitkársága). [<https://www.kozlekedesihatosag.kormany.hu/>] Accessed 28 October 2020.

[4] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-miniszteriuma>]. Accessed 28 October 2020.

[5] Ministry of Defence (Honvédelmi Minisztérium). [<https://kormany.hu/honvedelmi-miniszterium>]. Accessed 28 October 2020.

[6] Ministry of Agriculture (Agrárminisztérium). [<https://kormany.hu/agrarminiszterium>]. Accessed 28 October 2020.

[7] National Centre for Epidemiology (Országos Epidemiológiai Központ). "Laboratories of the Pandemic Microbiology

Reference Centre at the National Centre for Epidemiology" ("Az OEK járványügyi mikrobiológiai referencia központ laboratóriumai"). [<http://www.oek.hu/oekfile.pl?fid=6704>]. Accessed 28 October 2020.

[8] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>]. Accessed 28 October 2020.

[9] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). [<https://www.antsz.hu/>]. Accessed 28 October 2020.

[10] National Research, Development and Innovation Office (Nemzeti Kutatási, Fejlesztési és Innovációs Hivatal). "About the Office". ("NKFI Hivatalról") [<https://nkfi.gov.hu/hivatalrol>]. Accessed 28 October 2020.

[11] Verification Research, Training and Information Centre. "BWC Legislation Database. H." [<https://www.vertic.org/programmes/biological-weapons-and-materials/bwc-legislation-database/h/>]. 28 October 2020

1.6 IMMUNIZATION

1.6.1 Vaccination rates

1.6.1a

Immunization rate (measles/MCV2)

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

Current Year Score: 2

2019

World Health Organization

1.6.1b

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

Yes = 1, No = 0

Current Year Score: 1

2020

OIE WAHIS database

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

2.1 LABORATORY SYSTEMS STRENGTH AND QUALITY

2.1.1 Laboratory testing for detection of priority diseases

2.1.1a

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

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

Current Year Score: 2

The national laboratory system conducts diagnostic tests for all six World Health Organization (WHO)-defined core tests. All of these tests are performed at the National Center for Epidemiology (NCE). Polymerase chain reaction (PCR) testing for Influenza virus (flu), virus culture for poliovirus (polio), and serology for HIV are performed at the NCE's Virology Department. [1] Microscopy for mycobacterium tuberculosis (tuberculosis) is performed at the National Korányi Tuberculosis and Pulmonology Centre. [2] Rapid diagnostic testing for plasmodium spp. (malaria) is performed at the NCE's Parasitology Department. [3] Tests for Salmonella enteritidis can be done at the Department of Phage Typing and Molecular Epidemiology. [4] There is no publicly available evidence that Hungary has defined the four country-specific tests. [5]

[1] National Centre for Epidemiology (Országos Epidemiológiai Központ). "Virology Tests" ("Virologiai vizsgálatok"). [<http://www.oek.hu/oek.web?nid=718&pid=1>]. Accessed 29 October 2020.

[2] National Centre for Epidemiology (Országos Epidemiológiai Központ). "Tuberculosis related Rare Microbiology Tests" ("TBC-vel kapcsolatos ritka mikrobiológiai vizsgálatok"). [<http://www.oek.hu/oek.web?nid=1006&pid=1>]. Accessed 29 October 2020.

[3] National Centre for Epidemiology (Országos Epidemiológiai Központ). "Rare Tests Diagnosing Parasite Illnesses" ("Parazitás megbetegedések kimutatására irányuló ritka vizsgálatok"). [<http://www.oek.hu/oek.web?nid=976&pid=1>]. Accessed 29 October 2020.

[4] National Centre for Epidemiology (Országos Epidemiológiai Központ). "Priority work plan tasks of the Department of Phage Typing and Molecular Epidemiology (2007)" ("A Fágtypizálási és Molekuláris Epidemiológiai osztály kiemelt munkatervi feladatai (2007)"). [<http://www.oek.hu/oek.web?nid=548&pid=2&to=1118,1234&lang=hun>]. Accessed 29 October 2020.

[6] World Health Organisation (WHO). "WHO European Region: Joint External Evaluation (JEE) Mission Reports". [<http://www.who.int/ihr/procedures/mission-reports-europe/en/>]. Accessed 29 October 2020.

2.1.1b

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

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

Current Year Score: 0

There is insufficient evidence that Hungary has a national plan for conducting testing during a public health emergency, but it does not include considerations for testing for novel pathogens, scaling capacity, and defining goals for testing. Decree No. 18/1998 of the Minister for Public Health on Preventive Epidemic Measurements of Infectious Diseases and Epidemics regulates testing, vaccination, quarantines and other measures, but does not make provisions to scale capacity or deal with unknown pathogens. Article 26 regulates testing when there is a pandemic, or, according to (1) e there is a suspicion that an unknown pathogen might be contagious, in which case an epidemiological investigation must be conducted, but there is no plan to specifically test for currently unknown pathogens, scaling capacity or defining goals for testing. Article 32 also deals with procedures during pandemics, but it only regulates limiting the activity of educational facilities. Annex 1 lists known diseases and procedures to stop the spreading. Listed diseases include anthrax, brucellosis, Chikungunya virus, cholera, dengue, Enterohemorrhagic E. coli enteritis (EHEC) and other kinds of E. coli enteritis, hantavirus, hepatitis, leptospirosis, listeriosis and others. [1] There is no evidence of a national plan that includes considerations for testing for novel pathogens, scaling capacity or defining goals for testing on the websites of the Ministry of Human Capacities, National Centre for Epidemiology, National Public Health and Medical Officer Service, National Center for Public Health or the Ministry of Agriculture. [2] [3] [4] [5] [6]

- [1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree No. 18/1998 of the Minister for Public Health on Preventive Epidemic Measurements of Infectious Diseases and Epidemics" ("18/1998. (VI. 3.) NM rendelet a fertőző betegségek és a járványok megelőzése érdekében szükséges járványügyi intézkedésekről"). [<https://net.jogtar.hu/jogszabaly?docid=99800018.nm>]. Accessed 1 November 2020.
- [2] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-minisztériuma>]. Accessed 1 November 2020.
- [3] National Centre for Epidemiology (Országos Epidemiológiai Központ). [<http://www.oek.hu/>]. Accessed 1 November 2020.
- [4] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). [<https://www.antsz.hu>]. Accessed 1 November 2020.
- [5] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>]. Accessed 1 November 2020.
- [6] Ministry of Agriculture (Agrárminisztérium). [<https://kormany.hu/agrarminisztérium>]. Accessed 1 November 2020.

2.1.2 Laboratory quality systems

2.1.2a

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

Yes = 1, No = 0

Current Year Score: 1

Hungary has national laboratories that serve as references facilities with accreditation. Hungary has multiple national reference laboratories at the National Center for Epidemiology (NCE). [1] All of these are accredited at least as ISO 15189:2003 (on quality and competence of medical laboratories). [2, 3] NCE testing laboratories at the Department of Bacteriology, Mycology, Parasitology and Typology and at the Department of Virology comply with ISO 15189:2007. [4,5]

- [1] National Centre for Epidemiology (Országos Epidemiológiai Központ). "Laboratories of the Pandemic Microbiology Reference Centre at the National Centre for Epidemiology" ("Az OEK járványügyi mikrobiológiai referencia központ laboratóriumai"). [<http://www.oek.hu/oekfile.pl?fid=6704>]. Accessed 29 October 2020.
- [2] National Accreditation Authority (Nemzeti Akkreditációs Hatóság). "Medical testing" ("Orvosi vizsgálólaboratórium"). [<http://www.nah.gov.hu/kategoriak/orvosi-diagnosztikai-laboratorium>]. Accessed 29 October 2020.

- [3] Hungarian Standards Institution (Magyar Szabványügyi Testület). "Standard MSZ EN 15189:2013" ("MSZ EN 15189:2013 szabvány").
[http://www.mszt.hu/web/guest/webaruhaz?p_p_id=msztwebshop_WAR_MsztWAportlet&p_p_lifecycle=1&p_p_state=normal&p_p_mode=view&p_p_col_id=column-1&p_p_col_pos=1&p_p_col_count=2&_msztwebshop_WAR_MsztWAportlet_ref=155510&_msztwebshop_WAR_MsztWAportlet_javax.portlet.action=search]. Accessed 29 October 2020.
- [4] National Centre for Epidemiology (Országos Epidemiológiai Központ). "Accreditation Certificate of Testing Laboratory at the Department of Bacteriology, Mycology, Parasitology and Typology" ("A Bakterológiai, Mikológia, Parazitológia és Tipológia Főosztály vizsgálólaboratóriumának akkreditációs okirata"). [<http://www.oek.hu/oek.web?nid=680&pid=1>]. Accessed 29 October 2020.
- [5] National Centre for Epidemiology (Országos Epidemiológiai Központ). "Accreditation Certificate of Testing Laboratory at the Department of Virology" ("A Virologiai Főosztály vizsgálólaboratóriumának akkreditációs okirata"). [<http://www.oek.hu/oek.web?nid=684&pid=1>]. Accessed 29 October 2020.

2.1.2b

Is there a national laboratory that serves as a reference facility which is subject to external quality assurance review?

Yes = 1, No = 0

Current Year Score: 1

The national laboratories that serve as reference facilities are subject to external quality assurance review. Hungary has multiple national reference laboratories at the National Centre for Epidemiology (NCE). [1] All of these are accredited at least as ISO 15189:2003 (on quality and competence of medical laboratories). [2, 3] NCE testing laboratories at the Department of Bacteriology, Mycology, Parasitology and Typology and at the Department of Virology comply with ISO 15189:2007. [4,5] ISO 15189 certification requires external quality assurance reviews. [6]

- [1] National Centre for Epidemiology (Országos Epidemiológiai Központ). "Laboratories of the Pandemic Microbiology Reference Centre at the National Centre for Epidemiology" ("Az OEK járványügyi mikrobiológiai referencia központ laboratóriumai"). [<http://www.oek.hu/oekfile.pl?fid=6704>]. Accessed 29 October 2020.
- [2] National Accreditation Authority (Nemzeti Akkreditációs Hatóság). "Medical testing" ("Orvosi vizsgálólaboratórium"). [<http://www.nah.gov.hu/kategoriak/orvosi-diagnosztikai-laboratorium>]. Accessed 29 October 2020.
- [3] Hungarian Standards Institution (Magyar Szabványügyi Testület). "Standard MSZ EN 15189:2013" ("MSZ EN 15189:2013 szabvány").
[http://www.mszt.hu/web/guest/webaruhaz?p_p_id=msztwebshop_WAR_MsztWAportlet&p_p_lifecycle=1&p_p_state=normal&p_p_mode=view&p_p_col_id=column-1&p_p_col_pos=1&p_p_col_count=2&_msztwebshop_WAR_MsztWAportlet_ref=155510&_msztwebshop_WAR_MsztWAportlet_javax.portlet.action=search]. Accessed 29 October 2020.
- [4] National Centre for Epidemiology (Országos Epidemiológiai Központ). "Accreditation Certificate of Testing Laboratory at the Department of Bacteriology, Mycology, Parasitology and Typology" ("A Bakterológiai, Mikológia, Pazitológia és Tipológia Főosztály vizsgálólaboratóriumának akkreditációs okirata"). [<http://www.oek.hu/oek.web?nid=680&pid=1>]. Accessed 29 October 2020.
- [5] National Centre for Epidemiology (Országos Epidemiológiai Központ). "Accreditation Certificate of Testing Laboratory at the Department of Virology" ("A Virologiai Főosztály vizsgálólaboratóriumának akkreditációs okirata"). [<http://www.oek.hu/oek.web?nid=684&pid=1>]. Accessed 29 October 2020.
- [6] World Health Organisation. "Content Sheet 10-1: Overview of External Quality Assessment (EQA)". [http://www.who.int/ihr/training/laboratory_quality/10_b_eqa_contents.pdf]. Accessed 29 October 2020.

2.2 LABORATORY SUPPLY CHAINS

2.2.1 Specimen referral and transport system

2.2.1a

Is there a nationwide specimen transport system?

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence of a nationwide specimen transportation system being in place in Hungary. There is no evidence of such a system on the websites of the Ministry of Agriculture, the Ministry of Human Resources, the Public Procurement Authority or private courier companies. [1, 2, 3, 4, 5] Both the National Center for Epidemiology and the National Food Chain Security Office (which is solely responsible for animal health, including zoonoses) have policies of accepting samples and guidelines for transportation, however. The policies and guidelines are technical and focus on how to collect and store the samples and on suitable containers for transportation. [6, 7, 8, 9]

[1] Ministry of Agriculture (Agrárminisztérium). [https://kormany.hu/agrarminiszterium]. Accessed 29 October 2020.

[2] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [http://www.kormany.hu/hu/emberi-eroforrasok-miniszteriuma]. Accessed 29 October 2020.

[3] Public Procurement Authority (Közbeszerzési Hatóság). "Announcements" ("Hirdetmények"). [http://www.kozbeszerzes.hu/adatbazis/keres/hirdetmeny/]. Accessed 29 October 2020.

[4] DHL Hungary (DHL Magyarország). 2018. "Life Science and Healthcare" ("Élettudomány és egészségügy"). [https://www.dhl.hu/hu/logisztika/iparagi_megoldasok/elettudomany_es_egeszsegugy.html]. Accessed 29 October 2020.

[5] UPS Hungary (UPS Magyarország). 2018. "Healthcare" ("Egészségügy"). [https://www.ups.com/hu/hu/services/healthcare.page?]. Accessed 29 October 2020.

[6] National Centre for Epidemiology (Nemzeti Epidemiológiai Központ). 2011. "Information on Sending Specimens ("Minta beküldésével kapcsolatos információk"). [http://www.oek.hu/oek.web?nid=315&pid=1&to=1145&lang=hun]. Accessed 29 October 2020.

[7] National Centre for Epidemiology (Nemzeti Epidemiológiai Központ). 2017. Guidelines on Specimen Acquisition ("Mintavételi irányelvek"). [http://www.oek.hu/oekfile.pl?fid=7315]. Accessed 29 October 2020.

[8] National Food Chain Security Office (Nemzeti Élelmiszerlánc-biztonsági Hivatal). 2014. "Specimens Order of Acceptance" ("Bevizsgálendő minták fogadásának rendje"). [https://portal.nebih.gov.hu/-/bevizsgalando-mintak-fogadasanak-rendje]. Accessed 29 October 2020.

[9] National Food Chain Security Office (Nemzeti Élelmiszerlánc-biztonsági Hivatal). "Contact Details of Laboratories" ("NÉBIH Laboratóriumok elérhetőségei"). [http://portal.nebih.gov.hu/kapcsolat/laboratoriumok/nebih-laboratoriumok]. Accessed 29 October 2020.

2.2.2 Laboratory cooperation and coordination

2.2.2a

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

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

Current Year Score: 0

There is no evidence of a plan to rapidly authorize or license laboratories to supplement the capacity of the national public health laboratory system to scale up testing during an outbreak in Hungary. There is no such evidence on the websites of the Ministry of Agriculture, Ministry of Human Capacities, National Centre for Epidemiology, National Food Chain Security Office, National Public Health and Medical Officer Service or the National Center for Public Health. [1] [2] [3] [4] [5] [6]

[1] Ministry of Agriculture (Agrárminisztérium). [<https://kormany.hu/agrarminiszterium>]. Accessed 29 October 2020.

[2] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-miniszteriuma>]. Accessed 29 October 2020.

[3] National Centre for Epidemiology (Nemzeti Epidemiológiai Központ). [<http://www.oek.hu/>]. Accessed 29 October 2020.

[4] National Food Chain Security Office (Nemzeti Élelmiszerlánc-biztonsági Hivatal). [<https://portal.nebih.gov.hu>]. Accessed 29 October 2020.

[5] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). “Data on Pandemic Diseases” (“Fertőző betegségek adatai”). [https://www.antsz.hu/felso_menu/temaink/jarvany/Fertozo_betegsegek/fertozo]. Accessed 29 October 2020.

[6] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>]. Accessed 29 October 2020.

2.3 REAL-TIME SURVEILLANCE AND REPORTING

2.3.1 Indicator and event-based surveillance and reporting systems

2.3.1a

Is there evidence that the country is conducting ongoing event-based surveillance and analysis for infectious disease?

Yes, there is evidence of ongoing event-based surveillance and evidence that the data is being analyzed on a daily basis = 2,

Yes, there is evidence of ongoing event-based surveillance, but no evidence that the data are being analyzed on a daily basis

= 1, No = 0

Current Year Score: 0

There is no evidence that Hungary is conducting ongoing event-based surveillance and daily analysis for the same. Hungary conducts indicator-based analysis for infectious disease, including syndromic analysis for certain diseases, and the data are analysed on a daily basis. The National Center for Epidemiology is responsible for conducting ongoing indicator-based surveillance (IBS) and analysis for infectious diseases. [1] IBS data are analysed on a daily basis and published weekly and yearly by the National Public Health and Medical Officer Service. Both types of reports are derived from event-based surveillance systems, which routinely collect data on particular diseases. [1] However, there is no evidence that the National Center for Epidemiology performs event based surveillance and analysis. [1]

[1] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). “Data on Pandemic Diseases” (“Fertőző betegségek adatai”). [https://www.antsz.hu/felso_menu/temaink/jarvany/Fertozo_betegsegek/fertozo]. Accessed 29 October 2020.

2.3.1b

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

Yes = 1, No = 0

Current Year Score: 0

There is no publicly available evidence that Hungary reported a potential public health emergency of international concern to the World Health Organization (WHO) within the last two years. The last disease outbreak the country reported was in 1999, Meningococcal disease. [1] There is no other evidence of reported potential public health emergency of international concern – including in relation to COVID-19 – on the website of the WHO or on the page of the Ministry of Human Capacities. [2] [3]

[1] World Health Organisation. "Disease Outbreak News, Hungary". [<https://www.who.int/csr/don/archive/country/hun/en/>] Accessed 30 October 2020.

[2] World Health Organisation. "Data and statistics, Hungary". [<https://www.euro.who.int/en/countries/hungary/data-and-statistics>] Accessed 30 October 2020.

[3] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-miniszteriuma>]. Accessed 30 October 2020.

2.3.2 Interoperable, interconnected, electronic real-time reporting systems

2.3.2a

Does the government operate an electronic reporting surveillance system at both the national and the sub-national level?

Yes = 1 , No = 0

Current Year Score: 1

The government operates an electronic reporting surveillance system at the national level. The National Center for Public Health (NCPH) manages the National Professional Information System (NPIS) which includes several systems, including one for epidemics, the Epidemic Expert System (EES). [1] [2] NPHMOS and NCPH is supervised by the Ministry of Human Capacities. [3] [4] EES is an electronic reporting surveillance system that operates at both the national and the sub-national (county) level. [5] EES contains data on cholera, typhus, salmonellosis, shigellosis, other E.coli related diseases, botulism, plague, anthrax, brucellosis, malleus, diphtheria, Q fever, rabies, malaria, among other diseases. [6]

[1] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "NPIS" ("OSZIR"). [<https://www.antsz.hu/oszir>]. Accessed 31 October 2020.

[2] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>]. Accessed 29 October 2020.

[3] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "About Us" ("Rólunk"). [https://www.antsz.hu/felso_menu/rolunk]. Accessed 31 October 2020.

[4] National Center for Public Health (Nemzeti Népegészségügyi Központ). "Organizational and operational rules". ("Szervezeti és Működési Szabályzat"). [<https://www.nnk.gov.hu/index.php/kozerdeku/szervezeti-es-mukodesi-szabalyzat>]. Accessed 31 October 2020.

[5] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "Epidemic Expert System" ("Járványügyi szakrendszer"). [https://www.antsz.hu/oszir/jarvanyugyi_szakrendszer]. Accessed 31 October 2020.

[6] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "ICD List Used for Reporting Epidemics" ("Fertőző bejelentéshez használandó BNO-lista"). [https://www.antsz.hu/data/cms63777/OSZIR_fertozo_bejelenteshaz_hasznalando_BNO_lista_20141126.pdf]. Accessed 31 October 2020.

2.3.2b

Does the electronic reporting surveillance system collect ongoing or real-time laboratory data?

Yes = 1, No = 0

Current Year Score: 1

The electronic reporting surveillance system collects ongoing or real-time laboratory data. The National Center for Public Health (NCPH) manages the National Professional Information System (NPIS), which includes several systems, including one for epidemics, the Epidemic Expert System (EES). [1] NPHMOS and NCPH are supervised by the Ministry of Human Resources. [2] [3] EES is an electronic reporting surveillance system that operates at both the national and the sub-national (county) level. [4] EES contains data on cholera, typhus, salmonellosis, shigellosis, other E.coli related diseases, botulism, plague, anthrax, brucellosis, malleus, diphtheria, Q fever, rabies, malaria, among other diseases. [5] EES collects real-time laboratory data through its sub-system, the Infectious Patient Reporting Sub-System (IPRSS). [4, 5] All microbiological laboratories and other medical service centres are required to notify certain infectious patients through the IPRSS. [5]

[1] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "NPIS" ("OSZIR"). [https://www.antsz.hu/oszir]. Accessed 31 October 2020.

[2] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "About Us" ("Rólunk"). [https://www.antsz.hu/felso_menu/rolunk]. Accessed 31 October 2020.

[3] National Center for Public Health (Nemzeti Népegészségügyi Központ). "Organizational and operational rules". ("Szervezeti és Működési Szabályzat"). [https://www.nnk.gov.hu/index.php/kozerdeku/szervezeti-es-mukodesi-szabalyzat]. Accessed 31 October 2020.

[4] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "Epidemic Expert System" ("Járványügyi szakrendszer"). [https://www.antsz.hu/oszir/jarvanyugyi_szakrendszer]. Accessed 31 October 2020.

[5] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "ICD List Used for Reporting Epidemics" ("Fertőző bejelentéshez használandó BNO-lista"). [https://www.antsz.hu/data/cms63777/OSZIR_fertozo_bejelenteshoz_hasznalando_BNO_lista_20141126.pdf]. Accessed 31 October 2020.

2.4 SURVEILLANCE DATA ACCESSIBILITY AND TRANSPARENCY

2.4.1 Coverage and use of electronic health records

2.4.1a

Are electronic health records commonly in use?

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

Current Year Score: 2

Electronic health records are commonly in use. In accordance with article 35/K of Law XLVII of 1997 on Healthcare and Related Personal Data Management and Security, Hungary's health records are fully electronic. [1] As of 1 November 2017, all healthcare providers in Hungary (both private and public) are required to use the Electronic Healthcare Service Space (EHSS), which is the country's sole electronic health record system. EHSS is a publicly owned, secure national network established exclusively for electronic communication between health care providers, such as GPs, pharmacies, inpatient and outpatient care facilities. [2]

- [1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Law XLVII of 1997 on Healthcare and Related Personal Data Management and Security" ("1997. évi XLVII. törvény az egészségügyi és a hozzájuk kapcsolódó személyes adatok kezeléséről és védelméről"). [<https://net.jogtar.hu/jogszabaly?docid=99700047.TV>]. Accessed 31 October 2020.
- [2] Electronic Healthcare Service Space (EHSS) Information Portal (Elektronikus Egészségügyi Szolgáltatási Tér (EESZT Információs Portál). "What is EHSS?" ("Mi az EESZT?"). [<https://e-egeszsegugy.gov.hu/mi-az-eeszt->]. Accessed 31 October 2020.

2.4.1b

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

Yes = 1 , No = 0

Current Year Score: 1

The national public health system has access to electronic health records of individuals. Since 1 November 2017, all medical service providers and pharmacies exclusively use electronic health records. [1] All healthcare providers in Hungary (both private and public) are required to use a publicly owned, secure national network established exclusively for electronic communication between health care providers. [2] All stakeholders in the national health system, which consists of public healthcare under the Ministry of Human Capacities and private providers, access health records through this system. [1]

[1] Electronic Healthcare Service Space (EHSS) Information Portal (Elektronikus Egészségügyi Szolgáltatási Tér (EESZT Információs Portál). "What is EHSS?" ("Mi az EESZT?"). [<https://e-egeszsegugy.gov.hu/mi-az-eeszt->]. Accessed 31 October 2020.

[2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Law XLVII of 1997 on Healthcare and Related Personal Data Management and Security" ("1997. évi XLVII. törvény az egészségügyi és a hozzájuk kapcsolódó személyes adatok kezeléséről és védelméről"). [<https://net.jogtar.hu/jogszabaly?docid=99700047.TV>]. Accessed 31 October 2020.

2.4.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available information on data standards ensuring data comparability. The websites of the Ministry of Human Capacities and the National Public Health and Medical Officer Service contain no relevant information. [1, 2] The Electronic Healthcare Service Space (EHSS) is the sole electronic health record system in Hungary. The EHSS is a publicly owned, secure national network established exclusively for electronic communication between health care providers. The EHSS Information Portal explicitly states that other software is still in use by doctors and pharmacologists, but the data are compiled in the EHSS on a single platform. [3] EHSS Information Portal provides public information on EHSS and is a user help desk of EHSS. EHSS Information Portal is operated by the National Healthcare Services Centre. [4]

[1] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-minisztériuma>]. Accessed 31 October 2020.

[2] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). [<https://www.antsz.hu/>]. Accessed 31 October 2020.

[3] Electronic Healthcare Service Space (EHSS) Information Portal (Elektronikus Egészségügyi Szolgáltatási Tér (EESZT Információs Portál). "What is EHSS?" ("Mi az EESZT?"). [<https://e-egeszsegugy.gov.hu/mi-az-eeszt->]. Accessed 31 October 2020.

[4] Electronic Healthcare Service Space (EHSS) Information Portal (Elektronikus Egészségügyi Szolgáltatási Tér (EESZT Információs Portál). "Imprint" ("Impressum"). [<https://e-egeszsegugy.gov.hu/impresszum>]. Accessed 31 October 2020.

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

2.4.2a

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

Yes = 1, No = 0

Current Year Score: 0

There is insufficient evidence of a mechanism for sharing animal, human and wildlife (wild animal health) surveillance data in Hungary. There is no evidence of such a system on the websites of the National Food Chain Security Office, the National Public Health and Medical Officer Service, and the State Secretariat for Environmental Issues (which regulates environmental issues under the Ministry of Agriculture). [1, 2, 3] As per article 4 of the Decree of the Minister of Agriculture No. 81/2002 on the Animal Healthcare-Related Tasks in Preventing Zoonotic Diseases, animal healthcare offices inform human healthcare offices only when zoonotic diseases are detected, and units do not share surveillance data on a regular basis. [4] There is information exchange between human and animal health authorities via the National Infection Control and Antibiotics Committee (NICAC) as per article 13(2) of Decree No. 20/2009 of the Minister for Health on the Prevention of Healthcare-Associated Infections, its Professional Minimal Requirements and Surveillance. [5] The information exchange focuses on healthcare-associated infections including AMRs. NICAC also analyses and uses the results of the National Microbiological Database. [5] There is no evidence of information sharing on the website of the Ministry for Human Capacities either. [6]

[1] National Food Chain Security Office (Nemzeti Élelmiszerlánc-biztonsági Hivatal). "Animal Health and Animal Protection Directorate. Tasks." ("Állat-egészségügyi és Állatvédelmi Igazgatóság. Feladatok."). [<http://portal.nebih.gov.hu/allat-egeszsegugyi-es-allatvedelmi-igazgatosag>]. Accessed 31 October 2020.

[2] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). 2015. "Tasks and Operation of the National Public Health and Medical Officer Service" ("Az Állami Népegészségügyi és Tisztiorvosi Szolgálat feladatai és működése") [https://www.antsz.hu/felso_menu/rolunk]. Accessed 31 October 2020.

[3] Government of Hungary (Magyarország Kormánya). "Ministry of Agriculture. State Secretaries" ("Agrárminisztérium. Államtitkárok"). [<https://kormany.hu/agrarminiszterium/allamtitkarok>]. Accessed 31 October 2020.

[4] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree of the Minister of Agriculture No. 81/2002 on the Animal Healthcare Related Tasks in Preventing Zoonotic Diseases" ("81/2002. (IX. 4.) FVM rendelet a zoonózisok elleni védekezés állat-egészségügyi feladatairól"). [<https://net.jogtar.hu/jogszabaly?docid=a0200081.fvm>]. Accessed 31 October 2020.

[5] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree No. 20/2009 of the Minister for Health on the Prevention of Healthcare-Associated Infections, its Professional Minimal Requirements and Surveillance" ("20/2009. (VI. 18.) EüM rendelet az egészségügyi ellátással összefüggő fertőzések megelőzéséről, e tevékenységek szakmai minimumfeltételeiről és felügyeletéről"). [<https://net.jogtar.hu/jogszabaly?docid=a0900020.eum>]. Accessed 31 October 2020.

[6] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-miniszteriuma>]. Accessed 31 October 2020.

2.4.3 Transparency of surveillance data

2.4.3a

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

Yes = 1, No = 0

Current Year Score: 0

Hungary makes de-identified health surveillance data on disease outbreaks publicly available via reports on government websites on a monthly basis, but the data are published with a lag exceeding a month. Hungary publishes health surveillance data through its national health registries for various diseases. [1] Some of these registries make de-identified records available, for example of cases of healthcare-related infections. [2] The mandatory national health registries are used for health analysis, health statistics, improving the quality of healthcare, research, administration and emergency preparedness. The Ministry of Human Resources publishes weekly (and annual) reports on the epidemic status in Hungary by sub-national units (counties), but with a significant time delay. [3] The reports include de-identified records, cases of notifiable communicable diseases recorded during the current period in Hungary and other issues relevant for Hungary's epidemic status. The reports contain data on botulism, salmonellosis, shigellosis, other E.coli related diseases, varicella, listeriosis, Q fever, malaria, among other diseases. [3]

[1] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "NPIS" ("OSZIR"). [https://www.antsz.hu/oszir]. Accessed 31 October 2020.

[2] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "Healthcare related Infections" ("Kórházi fertőzések"). [https://www.antsz.hu/felso_menu/temaink/jarvany/korhazifert]. Accessed 31 October 2020.

[3] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "Weekly Data on Infectious Diseases" ("Fertőző betegségek heti adatai"). [https://www.antsz.hu/felso_menu/temaink/jarvany/Fertozo_betegsegek/fertozo]. Accessed 31 October 2020.

2.4.3b

Does the country make de-identified COVID-19 surveillance data (including details such as daily case count, mortality rate, etc) available via daily reports (or other formats) on government websites (such as the Ministry of Health, or similar)?

Yes = 1, No = 0

Current Year Score: 1

The Hungarian government publishes daily COVID-19 surveillance data. The government runs a dedicated website, which posts daily data including new cases, deaths, active cases, recoveries, and tests performed. [1] There is a detailed list on death cases that details sex, age and other diseases. [2]

[1] Information page on the coronavirus. (Tájékoztató oldal a koronavírusról). [https://koronavirus.gov.hu/]. Accessed 31 October 2020.

[2] Information page on the coronavirus. (Tájékoztató oldal a koronavírusról). "Deceased". ("Elhunytak"). [https://koronavirus.gov.hu/elhunytak]. Accessed 31 October 2020.

2.4.4 Ethical considerations during surveillance

2.4.4a

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

Yes = 1 , No = 0

Current Year Score: 1

There are laws safeguarding the confidentiality of identifiable patient information for individuals. Hungary has data protection laws to ensure the privacy and confidentiality of patient information. [1] [2] [3] Law XLVII of 1997 on Healthcare and Related Personal Data Management and Security safeguards all aspects of the confidentiality of identifiable patient information, with article 18 providing additional safeguards specifically for the de-identification of data gathered within health and epidemic surveillance. [2] The right to professional secrecy, guaranteed by the law, means that patients determine who has access to information on their illness and the expected outcome thereof, and can exclude people from that circle. [1] [2] In addition, the confidentiality of identifiable health information for individuals is safeguarded by the European Union's General Data Protection Regulation, which came into force in May 2018. [4]

[1] National Centre for Patients' Rights and Documentation (Országos Betegjogi, Ellátottjogi, Gyermekjogi és Dokumentációs Központ). 2013. "Patient's Rights" ("Betegjogok"). [<http://www.eubetegjog.hu/betegjogok.html>]. Accessed 31 October 2020.

[2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Law XLVII of 1997 on Healthcare and Related Personal Data Management and Security" ("1997. évi XLVII. törvény az egészségügyi és a hozzájuk kapcsolódó személyes adatok kezeléséről és védelméről"). [<https://net.jogtar.hu/jogszabaly?docid=99700047.TV>]. Accessed 31 October 2020.

[3] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Law CLIV of 1997 on Healthcare" ("1997. évi CLIV. törvény az egészségügyről"). [<https://net.jogtar.hu/jogszabaly?docid=99700154.TV>]. Accessed 31 October 2020.

[4] Official Journal of the European Union. 27 April 2016. "REGULATION (EU) 2016/679 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)". [<https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32016R0679&from=EN>]. Accessed 31 October 2020.

2.4.4b

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

Yes = 1 , No = 0

Current Year Score: 1

There is public evidence that the laws, regulations, or guidelines safeguarding the confidentiality of identifiable health information for individuals, such as that generated through health surveillance activities, include mention of protections from cyber attacks. The confidentiality of identifiable health information for individuals is safeguarded by the European Union's General Data Protection Regulation (GDPR), which came into force in May 2018. GDPR contains stipulations around network and information security, including a requirement that data held by state authorities must be overseen by a dedicated data protection officer who is proficient in dealing with cyber attacks and a requirement to inform all affected individuals within 72 hours of discovering a data breach. [1] Law XLVII of 1997 on Healthcare and Related Personal Data Management and Security and related Law CLIV of 1997 on Healthcare do not mention cyber attacks. [2] [3] Hungary has a comprehensive strategy and legal framework on cybercrimes. [4] Neither the Law on Digital Information Security of Governmental and

Municipal Bodies nor the Law on Qualified Data Safety mention health information, however. [5] [6]

- [1] Official Journal of the European Union. 27 April 2016. "Regulation (Eu) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)". [<https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32016R0679&from=EN>]. Accessed 31 October 2020.
- [2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Law XLVII of 1997 on Healthcare and Related Personal Data Management and Security" ("1997. évi XLVII. törvény az egészségügyi és a hozzájuk kapcsolódó személyes adatok kezeléséről és védelméről"). [<https://net.jogtar.hu/jogszabaly?docid=99700047.TV>]. Accessed 31 October 2020.
- [3] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Law CLIV of 1997 on Healthcare" (1997. évi CLIV. törvény az egészségügyről"). [<https://net.jogtar.hu/jogszabaly?docid=99700154.TV>]. Accessed 31 October 2020.
- [4] National Cybersecurity Institute (Nemzeti Kibervédelmi Intézet). "Legislations" ("Jogszabályok"). [<https://nki.gov.hu/hatosag/tartalom/vonatkozo-jogszabalyok/>]. Accessed 31 October 2020.
- [5] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Law L of 2013 on Digital Information Security of Governmental and Municipal Bodies" ("2013. évi L. törvény az állami és önkormányzati szervek elektronikus információbiztonságáról"). [<https://net.jogtar.hu/jogszabaly?docid=a1300050.tv>]. Accessed 31 October 2020.
- [6] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Law CLV of 2009 on Qualified Data Safety" ("2009. évi CLV. törvény a minősített adat védelméről"). [<https://net.jogtar.hu/jogszabaly?docid=a0900155.tv>]. Accessed 31 October 2020.

2.4.5 International data sharing

2.4.5a

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

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

Current Year Score: 2

Hungary has committed to sharing surveillance data continuously, including during an active emergency, with other countries in the region, for more than one disease. As a member of the European Union (EU), Hungary shares surveillance data during a public health emergency with other countries in the region. All EU and European Economic Area (EEA) countries are part of the European Centre for Disease Prevention and Control's Early Warning and Response System (EWRS). The EWRS is a platform to allow exchange of information on risk assessment and risk management for more timely, efficient and coordinated public health action". The EWRS is used for "notifications on outbreaks, exchanging information and decisions about the coordination of measures" among members. Over the years, it has played an important role in responding to health crises related to severe acute respiratory syndrome (SARS), Ebola virus disease, avian influenza in humans and other communicable diseases. [1] Article 9 of chapter IV of the European Union (EU) Decision on Serious Cross-Border Threats to Health notes that the European Commission shall make available to the national competent authorities through the EWRS any information that may be useful for coordinating the response including information related to serious crossborder threats to health and public health measures related to serious cross-border threats to health transmitted through rapid alert and information systems established under other provisions of Union law or the Euratom Treaty. [2] Additionally, the Ministry of Human Resources publishes weekly (and annual) reports on the epidemic status in Hungary by sub-national units (counties), which include cases notified to ECDPC. [3]

- [1] European Centre for Disease Prevention and Control. “Early Warning and Response System (EWRS).” [<https://ecdc.europa.eu/en/early-warning-and-response-system-ewrs>]. Accessed June 2019.
- [2] Decision No 1082/2013/EU of the European Parliament and of the Council of 22 October 2013 on Serious Cross-Border Threats to Health and Repealing Decision No 2119/98/EC. Official Journal of the European Union. [https://ec.europa.eu/health/sites/health/files/preparedness_response/docs/decision_serious_crossborder_threats_22102013_en.pdf]. Accessed June 2019.
- [3] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). “Weekly Data on Infectious Diseases” (“Fertőző betegségek heti adatai”). [https://www.antsz.hu/felso_menu/temaink/jarvany/Fertozo_betegsegek/fertozo]. Accessed 5 September 2018.

2.5 CASE-BASED INVESTIGATION

2.5.1 Case investigation and contact tracing

2.5.1a

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

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

Current Year Score: 0

There is no evidence of a national system that could provide support at the sub-national level to conduct contact tracing in the event of a public health emergency. Decree No. 18/1998 of the Minister for Public Health on Preventive Epidemic Measurements of Infectious Diseases and Epidemics states that the person responsible for fighting and preventing contagious diseases is the chief medical officer, who is the leader of the National Center for Public Health (NCPH) [1]. During the COVID-19 pandemic, this law was followed, but there are no signs of provisions to conduct contact tracing through dedicated plans or resources at subnational levels. The local government’s expert asks infected people about people with whom they have had contact, but contacting them is again the NCPH’s task. [2] No public evidence found on the websites of the Ministry of Human Capacities, National Public Health and Medical Officer Service or the National Center for Public Health. [3] [4] [5]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. “Decree No. 18/1998 of the Minister for Public Health on Preventive Epidemic Measurements of Infectious Diseases and Epidemics” (“18/1998. (VI. 3.) NM rendelet a fertőző betegségek és a járványok megelőzése érdekében szükséges járványügyi intézkedésekről”).

[<https://net.jogtar.hu/jogszabaly?docid=99800018.nm>]. Accessed 3 November 2020.

[2] Information page on the coronavirus. (Tájékoztató oldal a koronavírusról). 05 March 2020. “NNK: This is how contact tracing happens” (“NNK: Így zajlik a kontaktvizsgálat”). [<https://koronavirus.gov.hu/cikkek/nnk-igy-zajlik-kontaktvizsgalat>]. Accessed 3 November 2020.

[3] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-minisztariuma>]. Accessed 3 November 2020.

[4] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). [<https://www.antsz.hu>]. Accessed 3 November 2020.

[5] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>]. Accessed 3 November 2020.

2.5.1b

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

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

Current Year Score: 0

There is no evidence that Hungary provides wraparound services to enable infected people and their contacts to self-isolate as recommended, particularly economic support (paycheck, job security) and medical attention. Article 70 of the 1997 Law on Healthcare states that necessary and justified expenses that arise in connection with isolation and quarantine, including loss of income not covered by social security, shall be reimbursed. [1] However, no further details are provided on the specific costs covered or the process for reimbursement, and there is no evidence that this has happened during the COVID-19 pandemic. [1] Articles 28 and 29 of Decree No. 18/1998 of the Minister for Public Health on Preventive Epidemic Measurements of Infectious Diseases and Epidemics discuss the separation and isolation of infected person, but this decree does not mention financial support or medical attention. [2] In informational material published in March 2020, the National Center for Public Health explains different types of restrictions, for example quarantining at a hospital or at home, but does not make any references to any kind of wraparound services. [3] Similarly, the document “Procedures for the new coronavirus identified in 2020”, which was published on 8 October 2020, does not mention any support regarding self-isolation at home, beyond stating that the patients require medical attention. [4] There is no further relevant information on the websites of the Ministry of Human Capacities or the National Public Health and Medical Officer Service. [5] [6]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. “Law CLIV of 1997 on Healthcare” (“1997. évi CLIV. törvény az egészségügyről”). [<https://net.jogtar.hu/jogszabaly?docid=99700154.TV>]. Accessed 3 November 2020.

[2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. “Decree No. 18/1998 of the Minister for Public Health on Preventive Epidemic Measurements of Infectious Diseases and Epidemics” (“18/1998. (VI. 3.) NM rendelet a fertőző betegségek és a járványok megelőzése érdekében szükséges járványügyi intézkedésekről”). [<https://net.jogtar.hu/jogszabaly?docid=99800018.nm>]. Accessed 3 November 2020.

[3] National Center for Public Health (Nemzeti Népegészségügyi Központ). 25 March 2020. “Isolation, epidemiological surveillance and self-monitoring for COVID-19 virus infection”. (“Elkülönítés, járványügyi megfigyelés és önmegfigyelés a COVID-19 vírus fertőzéssel kapcsolatban”). [<https://www.nnk.gov.hu/index.php/koronavirus-tajekoztato/541-elkulonites-jarvanyugyi-megfigyeles-es-onmegfigyeles-a-covid-19-virus-fertozessel-kapcsolatban>] Accessed 3 November 2020.

[4] National Center for Public Health (Nemzeti Népegészségügyi Központ). “Procedures for the new coronavirus identified in 2020 (epidemiological and infection control rules to be followed)”. (“Eljárásrend a 2020. évben azonosított új koronavírussal kapcsolatban(követendő járványügyi és infekciókontroll szabályok”). [https://www.nnk.gov.hu/attachments/article/567/Elj%C3%A1r%C3%A1srend_COVID19_2020.10.08.pdf]] Accessed 3 November 2020.

[5] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-miniszteriuma>]. Accessed 3 November 2020.

[6] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). [<https://www.antsz.hu>]. Accessed 3 November 2020.

2.5.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Hungary publishes any de-identified data on contact tracing efforts for COVID-19 available. The websites of the government's "Information page on the coronavirus", Ministry of Human Capacities, the National Public Health and Medical Officer Service and the National Center for Public Health do not provide evidence for such data made available. [1] [2] [3] [4]

[1] Information page on the coronavirus. (Tájékoztató oldal a koronavírusról). [<https://koronavirus.gov.hu/>]. Accessed 31 October 2020.

[2] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-minisztériuma>]. Accessed 28 October 2020.

[3] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). [<https://www.antsz.hu/>]. Accessed 31 October 2020.

[4] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>] Accessed 28 October 2020.

2.5.2 Point of entry management

2.5.2a

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

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

Current Year Score: 0

There is no evidence of a joint plan or cooperative agreement between the public health system and border control authorities to identify suspected and potential cases in international travelers and trace and quarantine their contacts in the event of an active or future public health emergency. Border Police work under the Hungarian Police, and under Law CLIV of 1997 on Healthcare, the healthcare authority can ask for the help of the police to enforce necessary measures (Article 70/B) [1][2]. However, there is no evidence in the legislation or the Information page on the coronavirus, Ministry of Human Capacities, National Public Health and Medical Officer Service, National Center for Public Health that a joint plan exists or that there would be a plan for authorities to monitor suspected or potential cases for international travelers. [2] [3] [4] [5] [6] .

[1] Hungarian Police. "Border Police". ("Határrendészeti Főosztály"). [<http://www.police.hu/ugyintezes/szerv/orszagos-rendor-fokapitanysag/rendeszeti-foigazgatosag/hatarrendeszeti-foosztaly>]. Accessed 4 November 2020.

[2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Law CLIV of 1997 on Healthcare" ("1997. évi CLIV. törvény az egészségügyről"). [<https://net.jogtar.hu/jogszabaly?docid=99700154.TV>]. Accessed 4 November 2020.

[3] Information page on the coronavirus. (Tájékoztató oldal a koronavírusról). [<https://koronavirus.gov.hu/>]. Accessed 4 November 2020.

[4] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-minisztériuma>]. Accessed 4 November 2020.

[5] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). [<https://www.antsz.hu/>]. Accessed 4 November 2020.

[6] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>] Accessed 4 November

2020.

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

Hungary has applied epidemiology training programs and resources are provided by the government to send citizens to other countries to participate in applied epidemiology training programs. There is a national field epidemiology training program available in Hungary at graduate (master's) level [1] and there is an epidemiology professional training programme for students who have completed undergraduate or college education. [2] The National Center for Epidemiology (NCE) is an acknowledged training site for the European Union's (EU's) EPIET programme. [3] EPIET is also available to Hungarian nationals, and the Hungarian government provides resources to send its citizens to participate abroad. [4] As an EU member state, Hungary takes part in the ECDC fellowship program's EPIET and EUPHEM trainings. [5]

[1] Admission Centre (Felvételi Ügyfélszolgálat). "Public Health MSc" ("Népegészségügyi mesterképzési szak").

[https://www.felvi.hu/felveteli/szakok_kepzesek/szakleirasok/Szakleirasok/index.php/szak/287/szakleiras]. Accessed 31 October 2020.

[2] Admission Centre (Felvételi Ügyfélszolgálat). "Epidemiology professional training" ("Epidemiológia szakirányú továbbképzés"). [https://www.felvi.hu/felveteli/szakok_kepzesek/szakleirasok/Szakleirasok/index.php/szak/4564/szakleiras] Accessed 31 October 2020.

[3] European Centre for Disease Prevention and Control (ECDC). "Országos Epidemiológiai Központ: EPIET" ("National Centre for Epidemiology - EPIET"). [<https://ecdc.europa.eu/en/orszag-os-epidemiologiai-kozpont-epiet>]. Accessed 31 October 2020.

[4] National Centre for Epidemiology (Országos Epidemiológiai Központ). "EPIET/EUPHEM".

[<http://www.oek.hu/oek.web?to=2260&nid=1213&pid=1&lang=eng>]. Accessed 31 October 2020.

[5] Training Programs in Epidemiology and Public Health Interventions Network. "European Programme for Intervention Epidemiology Training (EPIET) and the European Programme for Public Health Microbiology Training (EUPHEM)"

[<https://www.tephinet.org/training-programs/european-programme-for-intervention-epidemiology-training-epiet-and-the-european>]. Accessed 31 October 2020.

2.6.1b

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

Yes = 1 , No = 0

Current Year Score: 1

There is available field epidemiology training in Hungary that is explicitly inclusive of animal health professionals, and Hungary is a member of EPIET. [1] The National Centre for Epidemiology is an acknowledged training site of European Union (EU) programmes EPIET and EUPHEM, whose programmes are also available for Hungarian nationals. [2] [3] The EU training programmes EPIET and EUPHEM explicitly allow veterinarians and animal health professionals. [2] [3] Moreover, veterinary students in Hungary can specialise in epidemiology. [4]

- [1] Training Programs in Epidemiology and Public Health Interventions Network. “European Programme for Intervention Epidemiology Training (EPIET) and the European Programme for Public Health Microbiology Training (EUPHEM)” [https://www.tephinet.org/training-programs/european-programme-for-intervention-epidemiology-training-epiet-and-the-european]. Accessed 31 October 2020.
- [2] European Centre for Disease Prevention and Control (ECDC). “Országos Epidemiológiai Központ: EPIET” (“National Centre for Epidemiology - EPIET”). [https://ecdc.europa.eu/en/orszagos-epidemiologiai-kozpont-epiet]. Accessed 12 October 2018.
- [3] National Centre for Epidemiology (Országos Epidemiológiai Központ). “EPIET/EUPHEM”. [http://www.oek.hu/oek.web?to=2260&nid=1213&pid=1&lang=eng]. Accessed 12 October 2018.
- [4] Admission Centre (Felvételi Ügyfélszolgálat). “Veterinary Surgeon” (“Állatorvosi osztatlan szak”). [https://www.felvi.hu/felveteli/szakok_kepzesek/szakleirasok/Szakleirasok/index.php/szak/2/szakleiras]. Accessed 5 September 2018.

2.6.2 Epidemiology workforce capacity

2.6.2a

Is there public evidence that the country has at least 1 trained field epidemiologist per 200,000 people?

Yes = 1, No = 0

Current Year Score: 0

2020

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

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

3.1 EMERGENCY PREPAREDNESS AND RESPONSE PLANNING

3.1.1 National public health emergency preparedness and response plan

3.1.1a

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

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

Current Year Score: 1

There is evidence that Hungary has an overarching national public health emergency response plan in place which addresses planning for multiple communicable diseases with pandemic potential, but it is not publicly available. According to a senior official presentation from the Ministry of Human Capacities, the National Public Health Emergency Response Plan (NPHERP) of Hungary has an annex, which focuses on comprehensive epidemic response. [1] The NPHERP deals with emergency preparedness in public health. A separate National Response Plan (NRP) sets out the organisational, technical and operational structures to respond to emergencies or disasters, and to define guidelines for the recovery phase. The NRP takes human epidemics, diseases with pandemic potential and animal epidemics into account as potential risks. [2] Neither the NRP nor the NPHERP is publicly available. [3] [4] The National Public Health and Medical Officer Service does not mention diseases among cases of emergencies. [4] In addition, Decree No. 18/1998 of the Minister for Public Health on Preventive Epidemic Measurements of Infectious Diseases and Epidemics deals specifically with communicable diseases: prevention, detection, isolation of patients, quarantine, treatments, disinfection and other measures. [5]

[1] Government Office (Kormányhivatal). "Institutional Questions of Civil Protection and Defence Planning" ("A katasztrófavédelmi és honvédelmi tervezés intézményi kérdései").

[http://www.kormanyhivatal.hu/download/e/40/73000/Csehi%20G%C3%A1bor%20-%20A%20katasztr%C3%B3fav%C3%A9delmi%20%C3%A9s%20honv%C3%A9delmi%20tervez%C3%A9s%20int%C3%A9zm%C3%A9nyi%20k%C3%A9rd%C3%A9sei.pdf]. Accessed 31 October 2020.

[2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Government Decree No. 234/2011 on Execution of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws" ("234/2011. (XI. 10.) Korm. rendelet a katasztrófavédelemről és a hozzá kapcsolódó egyes törvények módosításáról szóló 2011. évi CXXVIII. törvény végrehajtásáról"). [https://net.jogtar.hu/jogszabaly?dbnum=1&docid=A1100234.KOR&mahu=1]. Accessed 31 October 2020.

[3] National Directorate General for Disaster Management (Országos Katasztrófavédelmi Főigazgatóság). [http://www.katasztrofavedelem.hu]. Accessed 31 October 2020.

[4] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "Emergencies" (Veszélyhelyzetek"). [https://www.antsz.hu/felso_menu/temaink/veszelyhelyzetek]. Accessed 31 October 2020.

[5] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree No. 18/1998 of the Minister for Public Health on Preventive Epidemic Measurements of Infectious Diseases and Epidemics" ("18/1998. (VI. 3.) NM rendelet a fertőző betegségek és a járványok megelőzése érdekében szükséges járványügyi intézkedésekről").

[https://net.jogtar.hu/jogszabaly?docid=99800018.nm]. Accessed 4 November 2020.

3.1.1b

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

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

Current Year Score: 0

There is insufficient evidence that the overarching national public health emergency response plan has been updated in the last 3 years. As per article 10 of Government Decree No. 521/2013 on Public Health Emergency, the National Public Health Emergency Response Plan (NPHERP) shall be updated every two years. [1] According to a senior official presentation from the Ministry of Human Resources, the National Public Health Emergency Response Plan (NPHERP) of Hungary has an annex that focuses on comprehensive epidemic response. [2] A separate National Response Plan (NRP) takes human epidemics, diseases with pandemic potential and animal epidemics into account as potential risks. [1] As per article 31(3) of Government Decree

No. 234/2011 on Execution of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws, the NRP is reviewed at least annually. Neither the NRP nor the NPHERP is publicly available. [4] [5] There is no publicly available evidence that either the NRP or the NPHERP has, in practice, been updated within the past 3 years, including on the websites of the Ministry of Human Capacities and the National Center for Public Health. [6] [7] The National Public Health and Medical Officer Service does not mention diseases among cases of emergencies. [5] Decree No. 18/1998 of the Minister for Public Health on Preventive Epidemic Measurements of Infectious Diseases and Epidemics deals with communicable diseases, but it has not been updated in the past 3 years. [8]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Government Decree No. 512/2013 on Public Health Emergency ("512/2013. (XII. 30.) Korm. rendelet az egészségügyi válsághelyzeti ellátásról").

[https://net.jogtar.hu/jogszabaly?docid=a1300521.kor]. Accessed 31 October 2020.

[2] Government Office. "Institutional Questions of Civil Protection and Defence Planning" ("A katasztrófavédelmi és honvédelmi tervezés intézményi kérdései").

[http://www.kormanyhivatal.hu/download/e/40/73000/Csehi%20G%C3%A1bor%20-

%20A%20katasztr%C3%B3fav%C3%A9delmi%20%C3%A9s%20honv%C3%A9delmi%20tervez%C3%A9s%20int%C3%A9zm%C3%A9nyi%20k%C3%A9rd%C3%A9sei.pdf]. Accessed 31 October 2020.

[3] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Government Decree No. 234/2011 on Execution of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws" ("234/2011. (XI. 10.) Korm. rendelet a katasztrófavédelemről és a hozzá kapcsolódó egyes törvények módosításáról szóló 2011. évi CXXVIII. törvény végrehajtásáról"). [https://net.jogtar.hu/jogszabaly?dbnum=1&docid=A1100234.KOR&mahu=1]. Accessed 31 October 2020.

[4] National Directorate General for Disaster Management (Országos Katasztrófavédelmi Főigazgatóság). [http://www.katasztrofavedelem.hu]. Accessed 31 October 2020.

[5] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "Emergencies" (Veszélyhelyzetek). [https://www.antsz.hu/felso_menu/temaink/veszelyhelyzetek]. Accessed 31 October 2020.

[6] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [http://www.kormany.hu/hu/emberi-eroforrasok-minisztériuma]. Accessed 25 November 2020.

[7] National Center for Public Health (Nemzeti Népegészségügyi Központ). [https://www.nnk.gov.hu/]. Accessed 25 November 2020.

[8] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree No. 18/1998 of the Minister for Public Health on Preventive Epidemic Measurements of Infectious Diseases and Epidemics" ("18/1998. (VI. 3.) NM rendelet a fertőző betegségek és a járványok megelőzése érdekében szükséges járványügyi intézkedésekről").

[https://net.jogtar.hu/jogszabaly?docid=99800018.nm]. Accessed 4 November 2020.

3.1.1c

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

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

Current Year Score: 0

There is insufficient evidence as to whether the overarching national public health emergency response plan includes considerations for pediatric or other vulnerable populations. Neither the National Public Health Emergency Response Plan (NPHERP) nor the National Response Plan (NRP) is publicly available. [1] [2] The NPHERP deals with emergency preparedness in public health. [3] The NRP sets out the organisational, technical and operational structures to respond to emergencies or disasters, and to define guidelines for the recovery phase. [4] The NRP takes human epidemics, diseases with pandemic potential and animal epidemics into account as potential risks as per article 44(ca) of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws. [4] [5] Decree No. 18/1998 of the Minister for Public Health on Preventive Epidemic Measurements of Infectious Diseases and Epidemics does not include considerations for vulnerable groups. [6] There is no

evidence of plans considering pediatric or other vulnerable populations on the websites of the Ministry of Human Capacities, National Center for Public Health or the National Public Health and Medical Officer Service. [7] [8] [9]

- [1] National Directorate General for Disaster Management (Országos Katasztrófavédelmi Főigazgatóság). [http://www.katasztrofavedelem.hu]. Accessed 31 October 2020.
- [2] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). “Emergencies” (Veszélyhelyzetek). [https://www.antsz.hu/felso_menu/temaink/veszelyhelyzetek]. Accessed 31 October 2020.
- [3] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. “Government Decree No. 512/2013 on Public Health Emergency (“521/2013. (XII. 30.) Korm. rendelet az egészségügyi válsághelyzeti ellátásról”). [https://net.jogtar.hu/jogszabaly?docid=a1300521.kor] Accessed 31 October 2020.
- [4] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. “Government Decree No. 234/2011 on Execution of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws” (“234/2011. (XI. 10.) Korm. rendelet a katasztrófavédelemről és a hozzá kapcsolódó egyes törvények módosításáról szóló 2011. évi CXXVIII. törvény végrehajtásáról”). [https://net.jogtar.hu/jogszabaly?dbnum=1&docid=A1100234.KOR&mahu=1]. Accessed 31 October 2020.
- [5] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. “Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws” (“2011. évi CXXVIII. törvény a katasztrófavédelemről és a hozzá kapcsolódó egyes törvények módosításáról”). [https://net.jogtar.hu/jogszabaly?docid=A1100128.TV]. Accessed 31 October 2020.
- [6] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. “Decree No. 18/1998 of the Minister for Public Health on Preventive Epidemic Measurements of Infectious Diseases and Epidemics” (“18/1998. (VI. 3.) NM rendelet a fertőző betegségek és a járványok megelőzése érdekében szükséges járványügyi intézkedésekről”). [https://net.jogtar.hu/jogszabaly?docid=99800018.nm]. Accessed 4 November 2020.
- [7] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [http://www.kormany.hu/hu/emberi-eroforrasok-miniszteriuma]. Accessed 31 October 2020.
- [8] National Center for Public Health (Nemzeti Népegészségügyi Központ). [https://www.nnk.gov.hu/]. Accessed 31 October 2020.
- [9] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). [https://www.antsz.hu/]. Accessed 31 October 2020.

3.1.1d

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

Yes = 1 , No = 0

Current Year Score: 0

2020

WHO Strategic Partnership for IHR and Health Security (SPH)

3.1.2 Private sector involvement in response planning

3.1.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Hungary has a mechanism for engaging with the private sector to assist with outbreak emergency preparedness and response. The websites of the Ministry of Human Resources, the National Directorate General for Disaster Management and the National Public Health and Medical Officer Service do not have information on the role of the private sector in this regard. [1] [2] [3] Neither the National Public Health Emergency Response Plan (NPERP) nor the National Response Plan (NRP) is publicly available. [2] [3] As per article 3(3) of the Law CXXXII of 2006 on the Improvement of the Healthcare System, in case of a public health emergency such as an epidemic outbreak, private and public medical service providers are obliged to share their capacities, but the law does not provide any further detail. [4] As per article 2 of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws, general disaster preparedness and response are the task of public bodies and all Hungarian citizens, and the private sector is required to cooperate with public bodies when the disaster is caused or evoked by them, but this law does not provide any specific details on public sector involvement in outbreak preparedness or response. [5]

[1] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-minisztériuma>]. Accessed 1 November 2020.

[2] National Directorate General for Disaster Management (Országos Katasztrófavédelmi Főigazgatóság). [<http://www.katasztrofavedelem.hu>]. Accessed 1 November 2020.

[3] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). “Emergencies” (Veszélyhelyzetek”). [https://www.antsz.hu/felso_menu/temaink/veszelyhelyzetek]. Accessed 1 November 2020.

[4] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. “Law CXXXII of 2006 on the Improvement of the Healthcare System (“2006. évi CXXXII. törvény az egészségügyi ellátórendszer fejlesztéséről”).

[<https://net.jogtar.hu/jogszabaly?docid=a0600132.tv>]. Accessed 1 November 2020.

[5] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. “Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws” (“2011. évi CXXVIII. törvény a katasztrófavédelemről és a hozzá kapcsolódó egyes törvények módosításáról”). [<https://net.jogtar.hu/jogszabaly?docid=A1100128.TV>]. Accessed 1 November 2020.

3.1.3 Non-pharmaceutical interventions planning

3.1.3a

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

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

Current Year Score: 2

Hungary has legislation in place to implement non-pharmaceutical interventions (NPIs) during an epidemic or pandemic for any infectious disease. Article 32 of the Decree No. 18/1998 of the Minister for Public Health on Preventive Epidemic Measurements of Infectious Diseases and Epidemics allows for the closure, during a pandemic or danger of a pandemic, of: nurseries, kindergartens, primary schools, secondary schools, vocational training institutes, workshops, nursing homes, orphanages, child and youth protection institutes, higher education institutions, and student accommodation. [1] During the COVID-19 epidemic, other NPIs have been implemented as well, such as in November 2020, when Government Decree 479/2020 on Additional Protection Measures to be Applied During the Emergency limited the organization of events and density of seating, restricted the right to be outdoors between 00.00 and 05.00, and mandated social distancing. [2]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree No. 18/1998 of the Minister for Public Health on Preventive Epidemic Measurements of Infectious Diseases and Epidemics" ("18/1998. (VI. 3.) NM rendelet a fertőző betegségek és a járványok megelőzése érdekében szükséges járványügyi intézkedésekről").

[https://net.jogtar.hu/jogszabaly?docid=99800018.nm]. Accessed 4 November 2020.

[2] Hungarian Official Gazette. 03 November 2020. "Government Decree 479/2020 on additional protection measures to be applied during the emergency" ("479/2020. (XI. 3.) Korm. rendelet A veszélyhelyzet idején alkalmazandó további védelmi intézkedésekről") [https://magyarkozlony.hu/dokumentumok/8cbd291e418e353982f0af40c3a77d83c5d62fd4/megtekintes] Accessed 4 November 2020.

3.2 EXERCISING RESPONSE PLANS

3.2.1 Activating response plans

3.2.1a

Does the country meet one of the following criteria?

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

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

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

Current Year Score: 1

There is evidence that Hungary has activated its national emergency response plan for an infectious disease outbreak in the past year, but no evidence that the country has completed a national-level biological threat-focused exercise in the past year. On 11 March 2020, in response to the COVID-19 pandemic, Hungary instated a state of emergency that entailed limiting events, travel (especially from regions with higher infection rates), and the activities of institutions where people could gather, such as universities. [1] On 16 March further restrictions were introduced, such as bars, restaurants and most shops having to close at 15.00. [2] On 30 March the Hungarian parliament passed a law to allow the government to rule by decree, which, by extensions, lasted until the state of emergency ended on 26 June. [3] [4] On 3 November, following record numbers of daily COVID-19 infections and deaths, the government published a new package of measures based on Government Decree No. 234/2011 on Execution of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws, and declared a new state of emergency starting on 4 November. [5][6] [7] There is no evidence of a national-level biological threat-focused exercise conducted in the past year on the websites of the National Directorate General for Disaster Management, Ministry of Human Capacities, National Center for Public Health or the National Public Health and Medical Officer Service. [8] [9] [10] [11] The World Health Organization's website only lists Hungary as having conducted a 2017 exercise on response to a nuclear emergency. [12]

[1] Mfor. 11 March 2020. "The government has declared a state of emergency throughout the country!". ("Az egész ország területére kihirdette a vészhelyzetet a kormány! "). [https://mfor.hu/cikkek/makro/az-egesz-oroszag-teruletere-kihirdette-a-veszhelyzetet-a-kormany-.html]. Accessed 13 November 2020.

[2] Infostart. 16 March 2020. "Viktor Orbán: Hungary closes its borders, events are banned". ("Orbán Viktor: Magyarország lezárja határait, a rendezvényeket betiltják"). [https://infostart.hu/belfold/2020/03/16/orban-viktor] Accessed 13 November 2020.

[3] Guardian. 30 March 2020. "Hungary passes law that will let Orbán rule by decree".

[https://www.theguardian.com/world/2020/mar/30/hungary-jail-for-coronavirus-misinformation-viktor-orban] Accessed 13

November 2020.

[4] Euronews. 16 June 2020. "Hungary ends emergency powers, but new law opens up potential to re-apply them". [https://www.euronews.com/2020/06/16/hungary-debates-end-to-emergency-powers-but-new-law-opens-up-potential-to-re-apply-them] Accessed 13 November 2020.

[5] Hungarian Official Gazette. 03 November 2020. "Government Decree 479/2020 on additional protection measures to be applied during the emergency" ("479/2020. (XI. 3.) Korm. rendelet A veszélyhelyzet idején alkalmazandó további védelmi intézkedésekről") [https://magyarkozlony.hu/dokumentumok/8cbd291e418e353982f0af40c3a77d83c5d62fd4/megtekintes] Accessed 4 November 2020.

[6] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Government Decree No. 234/2011 on Execution of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws" ("234/2011. (XI. 10.) Korm. rendelet a katasztrófavédelemről és a hozzá kapcsolódó egyes törvények módosításáról szóló 2011. évi CXXVIII. törvény végrehajtásáról"). [https://net.jogtar.hu/jogszabaly?dbnum=1&dodid=A1100234.KOR&mahu=1]. Accessed 4 November 2020.

[7] New Europe. 4 November 2020. "Hungary declares state of emergency, announces coronavirus restrictions". [https://www.neweurope.eu/article/hungary-declares-state-of-emergency-announces-coronavirus-restrictions/] Accessed 13 November 2020.

[8] National Directorate General for Disaster Management, Ministry of the Interior (Belügyminisztérium Osztágos Katasztrófavédelmi Főigazgatóság). "About Us" ("Bemutakozás"). [https://www.katasztrofavedelem.hu/2/bemutakozas]. Accessed 4 November 2020.

[9] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [http://www.kormany.hu/hu/emberi-eroforrasok-miniszteriuma]. Accessed 4 November 2020.

[10] National Center for Public Health (Nemzeti Népegészségügyi Központ). [https://www.nnk.gov.hu/]. Accessed 4

November 2020. [11 National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). [https://www.antsz.hu/felso_menu/temaink/jarvany/antrez] Accessed 4 November 2020.

[12] World Health Organization. "Simulation Exercise." [https://extranet.who.int/sph/simulation-exercise]. Accessed 12 November 2020.

3.2.1b

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

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

Current Year Score: 0

There is no public evidence that in the last year Hungary has identified a list of gaps and best practices in response and developed a plan to improve response capabilities. The World Health Organization's (WHO's) after-action review page does not have any information on exercises in Hungary. [1] In October 2018, Hungary was one of 12 countries that participated in a 2-day polio outbreak simulation exercise (POSE) that was organized by the WHO and the European Centre for Disease Prevention and Control (ECDC), but there is no evidence of a more recent exercise. [2] There is no relevant evidence on the websites of the WHO, Ministry of Human Capacities, National Center for Public Health or National Public Health and Medical Officer Service. [3] [4] [5] [6]

[1] World Health Organization. "After Action Review." [https://extranet.who.int/sph/after-action-review]. Accessed 5 November 2020.

[2] World Health Organization. 1 November 2018. "Simulated poliovirus containment breach helps countries increase biorisk safety and security". [http://www.euro.who.int/en/countries/sweden/news/news/2018/11/simulated-poliovirus-

containment-breach-helps-countries-increase-biorisk-safety-and-security]. Accessed 5 November 2020.

[3] World Health organization Europe. [https://www.euro.who.int/]. Accessed 5 November 2020.

[4] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [http://www.kormany.hu/hu/emberi-eroforrasok-minisztériuma]. Accessed 5 November 2020.

[5] National Center for Public Health (Nemzeti Népegészségügyi Központ). [https://www.nnk.gov.hu/]. Accessed 5 November 2020.

[6] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat).

[https://www.antsz.hu/felso_menu/temaink/jarvany/antrez] Accessed 5 November 2020

3.2.2 Private sector engagement in exercises

3.2.2a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Hungary has in the past year undergone a national-level biological threat-focused exercise that has included private sector representatives. The World Health Organization's (WHO's) after-action review page does not have any information on exercises in Hungary. [1] In October 2018, Hungary took part in a 2-day polio outbreak simulation exercise (POSE) that was organized by the WHO and the European Centre for Disease Prevention and Control (ECDC), but there is no evidence of a more recent exercise. [2] There is no relevant evidence on the websites of the WHO, Ministry of Human Capacities, National Center for Public Health or National Public Health and Medical Officer Service. [3] [4] [5] [6] The World Health Organisation's Simulation Exercise page does not list any exercises conducted in the past year. [7]

[1] World Health Organization. "After Action Review." [https://extranet.who.int/sph/after-action-review]. Accessed 5 November 2020.

[2] World Health Organization. 1 November 2018. "Simulated poliovirus containment breach helps countries increase biorisk safety and security". [http://www.euro.who.int/en/countries/sweden/news/news/2018/11/simulated-poliovirus-containment-breach-helps-countries-increase-biorisk-safety-and-security]. Accessed 5 November 2020.

[3] World Health organization Europe. [https://www.euro.who.int/]. Accessed 5 November 2020.

[4] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [http://www.kormany.hu/hu/emberi-eroforrasok-minisztériuma]. Accessed 5 November 2020.

[5] National Center for Public Health (Nemzeti Népegészségügyi Központ). [https://www.nnk.gov.hu/]. Accessed 5 November 2020.

[6] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat).

[https://www.antsz.hu/felso_menu/temaink/jarvany/antrez] Accessed 5 November 2020.

[7] World Health Organization. "Simulation Exercise." [https://extranet.who.int/sph/simulation-exercise]. Accessed 24 November 2020.

3.3 EMERGENCY RESPONSE OPERATION

3.3.1 Emergency response operation

3.3.1a

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

Yes = 1 , No = 0

Current Year Score: 1

Hungary has an emergency operations center (EOC). The EOC, called National Center for Health, Psychology and Occupational Safety (NCHPOS), along with its support units and its regional branches, is part of Hungary's central emergency management system, which is managed by the National Directorate General for Disaster Management (NDGDM) at the Ministry of Interior (Mol). [1] Article 7 of Mol Decree 70/2011 on Applying the Rules of Tasks Connected to Work Safety and Occupational Health for Law Enforcement Agencies Under the Control of the Minister of the Interior defines the tasks of occupational safety inspectors, occupational health professionals and health commissioners. Subsection J of this article states that their task "in case of an infectious event that endangers the population" is "giving expert opinion from a public healthcare and work safety perspective on and following the application of the implementation plan". [2] The NDGDM lists epidemics among catastrophes and has recommendations on a code of conduct for the general public in case of an epidemic. [3]

[1] National Directorate General for Disaster Management. (Országos Katasztrófavédelmi Főigazgatóság). 2020.

"Organization". ("Szervezet"). [<https://www.katasztrofavedelem.hu/7/szervezet>]. Accessed 1 November 2020.

[2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Mol decree 70/2011 on applying the rules of tasks connected to work safety and occupational health for law enforcement agencies under the control of the Minister of the Interior". ("70/2011. (XII. 30.) BM rendelet a belügyminiszter irányítása alá tartozó rendvédelmi szervek munkavédelmi feladatai, valamint foglalkozás-egészségügyi tevékenysége ellátásának szabályairól").

[<https://net.jogtar.hu/jogszabaly?docid=a1100070.bm>]. Accessed 1 November 2020.

[3] National Directorate General for Disaster Management, Ministry of the Interior (Belügyminisztérium Országos Katasztrófavédelmi Főigazgatóság). "Types of Disasters: Epidemics" ("Katasztrófatípusok - Járványok").

[<https://www.katasztrofavedelem.hu/304/katasztrofatisuk-jarvanyok>]. Accessed 1 November 2020.

3.3.1b

Is the Emergency Operations Center (EOC) required to conduct a drill for a public health emergency scenario at least once per year or is there evidence that they conduct a drill at least once per year?

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that the emergency operations center is required to conduct a public health-related drill at least once per year or conducts a public health-related drill at least once per year. The Minister of Interior annually sets the plan for preparation for disaster management for the National Directorate General for Disaster Management (NDGDM). [1] The preparation is comprehensive and consists of theoretical training and drills that are required to be conducted at least once per year, before 15 December, focusing on disaster management, as prescribed by article 3 of "Mol Instruction No. 1/2017 to NDGDM on the Annual Disaster Management Preparation Plan of 2017" and article 3 of "Mol Instruction No. 1/2018 to NDGDM on the Annual Disaster Management Preparation Plan of 2018", but there is no evidence that this is required to address public health emergencies. [2] [3] There is no public evidence of public health-related drills on the websites of the Ministry of Human Capacities, National Civil Protection Inspectorate or the National Public Health and Medical Officer Service. [4] [5] [6]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Law CXXX of 2010 on Legislation ("2010. évi CXXX. törvény a jogalkotásról"). [<https://net.jogtar.hu/jogszabaly?docid=A1000130.TV>]. Accessed 1 November 2020.

[2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Mol Instruction No. 1/2017 to NDGDM on the Annual Disaster Management Preparation Plan of 2017 for Civil Protection Units, for Qualified Rescue Teams and Public

Safety Officials ("1/2017. (II. 21.) BM OKF utasítás a polgári védelmi szervezetek, a minősített önkéntes mentőszervezetek, valamint a közbiztonsági referensek 2017. évi katasztrófavédelmi felkészítésének rendjéről").

[<https://net.jogtar.hu/jogszabaly?docid=A17U0001.OKF×hift=ffffff4&txtreferer=00000001.TXT>]. Accessed 1 November 2020.

[3] Official Gazette. "Mol Instruction No. 2/2018 to NDGDM on the Annual Disaster Management Preparation Plan of 2018 for Civil Protection Units and Public Safety Officials ("2/2018. (III. 26.) BM OKF utasítás a polgári védelmi szervezetek, valamint a közbiztonsági referensek 2018. évi katasztrófavédelmi felkészítésének rendjéről").

[<http://www.kozlonyok.hu/kozlonyok/Kozlonyok/12/PDF/2018/13.pdf>]. Accessed 1 November 2020.

[4] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-minisztariuma>]. Accessed 1 November 2020.

[5] National Directorate General for Disaster Management. (Országos Katasztrófavédelmi Főigazgatóság). 2020.

[<https://www.katasztrofavedelem.hu/>]. Accessed 1 November 2020.

[6] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "Emergencies" (Veszélyhelyzetek"). [https://www.antsz.hu/felso_menu/temaink/veszelyhelyzetek]. Accessed 1 November 2020.

3.3.1c

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

Yes = 1, No = 0

Current Year Score: 0

There is no public evidence that 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. The National Directorate General for Disaster Management (NDGDM) conducted exercises in the past year, but they are not health-related. On 30 September 2020 there was an exercise simulating an aerial emergency, on 24 September 2020 there was an exercise simulating a mine explosion, and on 26 November 2019 there was an exercise simulating a fire on a passenger plane. [2][3][4] There is no evidence of a health-related exercise or response on the websites of NDGDM or the Ministry of Human Capacities. [5] [6]

[1] World Health Organization. "Strengthening health security by implementing the International Health Regulations (2005)" [<https://www.who.int/ihr/procedures/mission-reports-europe/en/>]. Accessed 8 November 2020.

[2] National Directorate General for Disaster Management. "National Exercise in SÁ¡rmellÃ©k". ("OrszÁ¡gos gyakorlat SÁ¡rmellÃ©ken"). [<https://www.katasztrofavedelem.hu/29/hirek/243399/orszag-os-gyakorlat-sarmelleken>]. Accessed 8 November 2020.

[3] National Directorate General for Disaster Management. "Joint Exercise in MÃ¡tra". ("KÃ¡s gyakorlaton a MÃ¡trÃ¡ban"). [<https://www.katasztrofavedelem.hu/29/hirek/243241/kozos-gyakorlaton-a-matraban>]. Accessed 8 November 2020.

[4] National Directorate General for Disaster Management. "Distressed aircraft â€" exer4cise in Debrecen". ("Bajba jutott lÃ©gi jÃ¡rmÃ±vek â€" gyakorlat Debrecenben"). [<https://www.katasztrofavedelem.hu/29/hirek/214276/bajba-jutott-legi-jarmuvek-gyakorlat-debrecenben>]. Accessed 8 November 2020.

[5] National Directorate General for Disaster Management. [<https://www.katasztrofavedelem.hu/>]. Accessed 8 November 2020.

[6] Ministry of Human Capacities (Emberi ErÃ¡sok MinisztÃ©riuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-minisztariuma>]. Accessed 8 November 2020.

3.4 LINKING PUBLIC HEALTH AND SECURITY AUTHORITIES

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

3.4.1a

Does the country meet one of the following criteria?

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

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

Current Year Score: 1

There is no evidence of a joint exercise in the past year, but Hungary has legislation to guide public health and security authorities to respond to events with relevance to public health. There is no evidence of a joint exercise on the websites of the National Directorate General for Disaster Management or Ministry of Human Capacities. [1] [2] The Joint Decree of the Minister of Defence and the Minister for Healthcare, Social and Family Affairs No. 21/2013 on the Tasks of the Hungarian Army in Case of Events with Relevance to Public Health and Epidemics, on its Execution and on the Cooperation with the National Public Health and Medical Officer Service regulates cooperation between public health and security authorities in the case of an event with relevance for public health, including a potential deliberate biological event. [5]

[1] National Directorate General for Disaster Management. [<https://www.katasztrofavedelem.hu>]. Accessed 8 November 2020.

[2] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-miniszteriuma>]. Accessed 8 November 2020.

[3] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Joint Decree of the Minister of Defence and the Minister for Healthcare, Social and Family Affairs No. 21/2013 on the Tasks of the Hungarian Army in case of events with relevance of public health and epidemics, on its Execution and on the Cooperation with the National Public Health and Medical Officer Service " ("21/2003. (VI. 24.) HM-ESzCsM együttes rendelet a Magyar Honvédség feladatával kapcsolatos közegészségügyi-járványügyi követelményekről, azok ellátásának, valamint az Állami Népegészségügyi és Tisztiorvosi Szolgálattal való együttműködésének rendjéről").

[<https://net.jogtar.hu/jogszabaly?docid=A0300021.HM&xtreferer=00000001.TXT>]. Accessed 8 November 2020

3.5 RISK COMMUNICATIONS

3.5.1 Public communication

3.5.1b

Does the risk communication plan (or other legislation, regulation or strategy document used to guide national public health response) outline how messages will reach populations and sectors with different communications needs (eg different languages, location within the country, media reach)?

Yes = 1, No = 0

Current Year Score: 0

There is insufficient evidence that Hungary has a risk communication plan for public health emergencies that outlines how messages will reach populations and sectors with different communication needs. Hungary's National Response Plan (NRP) sets out the organizational, technical and operational structures to respond to emergencies and disasters, and to define guidelines for the recovery phase. The NRP takes human epidemics, diseases with pandemic potential and animal epidemics into account as potential risks as per article 44(ca) of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws. [1] Articles 34 to 47 of Government Decree No. 234/2011 on Execution of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws sets out common rules for communications in case of risks and disasters, outlining how messages will reach the population, establishes communication channels to be used, minimal rules for the content, the releasing authority and cooperation among authorities. However it does not distinguish groups with different communication needs, there is no mention of minority languages and it discusses the communication methods homogenously for the whole country; methods of communication include mass media, the alarm system, loudspeakers, posters and electronic communication. [1] The NRP is not publicly available, however, as per a review of the websites of the National Public Health and Medical Officer Service, Ministry of Human Resources, and the National Directorate General for Disaster Management. [2] [3] [4]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Government Decree No. 234/2011 on Execution of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws" ("234/2011. (XI. 10.) Korm. rendelet a katasztrófavédelemről és a hozzá kapcsolódó egyes törvények módosításáról szóló 2011. évi CXXVIII. törvény végrehajtásáról"). [<https://net.jogtar.hu/jogszabaly?dbnum=1&docid=A1100234.KOR&mahu=1>]. Accessed 1 November 2020

[2] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "Emergencies" (Veszélyhelyzetek"). [https://www.antsz.hu/felso_menu/temaink/veszelyhelyzetek]. Accessed 1 November 2020.

[3] Ministry of Human capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-miniszteriuma>]. Accessed 1 November 2020.

[4] National Directorate General for Disaster Management, Ministry of the Interior (Belügyminisztérium Országos Katasztrófavédelmi Főigazgatóság). [<http://www.katasztrofavedelem.hu/>]. Accessed 1 November 2020.

3.5.1 Risk communication planning

3.5.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available risk communication plan for public health emergencies. According to the Ministry of Human Resources, Hungary's National Public Health Emergency Response Plan (NPERP) includes a risk communication plan to be used during a public health emergency. [1] The NPERP deals specifically with emergency preparedness in public health. [2] However, the NPERP is not publicly available. [3] A separate National Response Plan (NRP) sets out the organizational, technical and operational structures to respond to emergencies or disasters, and to define guidelines for the recovery phase. [4] The NRP takes human epidemics, diseases with pandemic potential and animal epidemics into account as potential risks as per article 44(ca) of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws. [4] [5] Article 34 of Government Decree No. 234/2011 on Execution of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws sets out common rules for communications in case of risks and disasters – without specifically addressing public health emergencies – including communication channels to be used, minimal rules for the content, establishing the releasing authority and cooperation among authorities. [4] There is no publicly available standalone risk communication document

that can be used for health emergencies. [3] [6] [7]

- [1] Government Office (Kormányhivatal). "Institutional Questions of Civil Protection and Defence Planning" ("A katasztrófavédelmi és honvédelmi tervezés intézményi kérdései").
[<http://www.kormanyhivatal.hu/download/e/40/73000/Csehi%20G%C3%A1bor%20-%20A%20katasztr%C3%B3fav%C3%A9delmi%20%C3%A9s%20honv%C3%A9delmi%20tervez%C3%A9s%20int%C3%A9zm%C3%A9nyi%20k%C3%A9rd%C3%A9sei.pdf>]. Accessed 1 November 2020.
- [2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Government Decree No. 512/2013 on Public Health Emergency ("512/2013. (XII. 30.) Korm. rendelet az egészségügyi válsághelyzeti ellátásról").
[<https://net.jogtar.hu/jogszabaly?docid=a1300521.kor>]. 1 November 2020
- [3] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "Emergencies" (Veszélyhelyzetek"). [https://www.antsz.hu/felso_menu/temaink/veszelyhelyzetek]. Accessed 1 November 2020.
- [4] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Government Decree No. 234/2011 on Execution of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws" ("234/2011. (XI. 10.) Korm. rendelet a katasztrófavédelemről és a hozzá kapcsolódó egyes törvények módosításáról szóló 2011. évi CXXVIII. törvény végrehajtásáról"). [<https://net.jogtar.hu/jogszabaly?dbnum=1&docid=A1100234.KOR&mahu=1>]. Accessed 1 November 2020.
- [5] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws" ("2011. évi CXXVIII. törvény a katasztrófavédelemről és a hozzá kapcsolódó egyes törvények módosításáról"). [<https://net.jogtar.hu/jogszabaly?docid=A1100128.TV>]. Accessed 1 November 2020.
- [6] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-miniszteriuma>]. Accessed 1 November 2020.
- [7] National Directorate General for Disaster Management, Ministry of the Interior (Belügyminisztérium Országos Katasztrófavédelmi Főigazgatóság). "About Us" ("Bemutatkozás"). [<https://www.katasztrofavedelem.hu/2/bemutatkozas>]. Accessed 1 November 2020.

3.5.1c

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

Yes = 1 , No = 0

Current Year Score: 0

There is no evidence that Hungary has a designated specific position within the government to serve as the primary spokesperson to the public during a public health emergency. According to the Ministry of Human Resources, Hungary's National Public Health Emergency Response Plan (NPHERP) includes a risk communication plan to be used during a public health emergency. [1] The NPHERP deals specifically with emergency preparedness in public health, but it is not publicly available. [2] [3] A separate National Response Plan (NRP) sets out the organizational, technical and operational structures to respond to emergencies or disasters. [4] Article 34 of Government Decree No. 234/2011 on Execution of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws sets out common rules for communications in case of risks and disasters – without specifically addressing public health emergencies – including communication channels to be used, minimum rules for content, establishment the releasing authority and cooperation among authorities. [1] There is no publicly available standalone risk communication document that can be used for health emergencies. [2] [3] [4] There is no evidence that a specific position would be designated to serve as the primary spokesperson during a public health emergency in the Government Decree No. 234/2011 on Execution of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Law, or on the websites of the the Ministry of Human Capacities, National Public Health and Medical Officer Service or

National Center for Public Health. [1] [2] [3] [5]

- [1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Government Decree No. 234/2011 on Execution of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws" ("234/2011. (XI. 10.) Korm. rendelet a katasztrófavédelemről és a hozzá kapcsolódó egyes törvények módosításáról szóló 2011. évi CXXVIII. törvény végrehajtásáról"). [<https://net.jogtar.hu/jogszabaly?dbnum=1&doid=A1100234.KOR&mahu=1>]. Accessed 6 November 2020
- [2] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-miniszteriuma>]. Accessed 6 November 2020.
- [3] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "Emergencies" (Veszélyhelyzetek"). [https://www.antsz.hu/felso_menu/temaink/veszelyhelyzetek]. Accessed 6 November 2020.
- [4] National Directorate General for Disaster Management, Ministry of the Interior (Belügyminisztérium Osztágos Katasztrófavédelmi Főigazgatóság). [<http://www.katasztrofavedelem.hu/>]. Accessed 6 November 2020.
- [5] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>]. Accessed 6 November 2020.

3.5.2 Public communication

3.5.2a

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

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

Current Year Score: 2

In the past year the public health system has actively shared messages via online media platforms to inform the public about ongoing public health concerns. The Hungarian government has a dedicated webpage to cover information on the COVID-19 pandemic, and it is updated regularly. [1] It also has a corresponding Facebook page, also updated regularly, that is followed by almost 200,000 people. [2] The government also regularly posted information about healthcare issues before the COVID-19 outbreak in early 2020. The National Public Health and Medical Officer Service publishes weekly updates on infectious diseases in the country going back to October 2017 and is still updated weekly. [3] The Ministry of Human Capacities publishes news on healthcare issues on its page, and did so before COVID-19 too. Current examples of topics covered include: availability of influenza vaccines, an expansion in preterm birth care capacity, development of a cardiological institute, and new equipment for the National Oncology Institute. [4] [5] [6] [7] [8]

- [1] Information page on the coronavirus. (Tájékoztató oldal a koronavírusról). [<https://koronavirus.gov.hu/>]. Accessed 6 November 2020.
- [2] The Facebook page of the Information page on the coronavirus. [<https://www.facebook.com/koronavirus.gov.hu>]. Accessed 6 November 2020.
- [3] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "Weekly Data on Infectious Diseases" ("Fertőző betegségek heti adatai"). [https://www.antsz.hu/felso_menu/temaink/jarvany/Fertozo_betegsegek/fertozo]. Accessed 6 November 2020.
- [4] Ministry of Human Capacities. [<https://kormany.hu/emberi-eroforrasok-miniszteriuma>] Accessed 6 November 2020.
- [5] Ministry of Human Capacities. 22 October 2020. "There are enough influenza vaccines for everyone". ("Mindenkinek jut influenza elleni oltás"). [<https://kormany.hu/hirek/elegendo-az-influenza-elleni-oltoanyag>]. Accessed 25 November 2020.

[6] Ministry of Human Capacities. 17 November 2020. "Chances of premature babies born with barely 1 kilogram have improved significantly". ("Jelentősen javultak az alig 1 kilogrammal világra jött koraszülöttek életéselyei"). [<https://kormany.hu/hirek/jelentosen-javultak-az-alig-1-kilogrammal-vilagra-jott-koraszulottek-eleteselyei>]. Accessed 25 November 2020.

[7] Ministry of Human Capacities. 5 November 2020. "The development of the Institute of Cardiology continues". ("Folytatódik a kardiológiai intézet fejlesztése"). [<https://kormany.hu/hirek/folytatodik-a-kardiologiai-intezet-fejlesztese>]. Accessed 25 November 2020.

[8] Ministry of Human Capacities. 12 October 2020. "The Institute of Oncology will receive three billion forints worth of medical equipment". ("Csaknem hárommilliárd forintos orvostechnológiai eszközfejlesztésben részesül az onkológiai intézet"). [<https://kormany.hu/hirek/csaknem-harommilliard-forintos-orvostechnologiai-eszkozfejlesztesben-reszesul-az-onkologiai-intezet>]. Accessed 25 November 2020.

3.5.2b

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

No = 1, Yes = 0

Current Year Score: 1

There is no evidence that a senior Hungarian leader has shared misinformation or disinformation on infectious diseases in the past two years. On 24 September 2020, a major Hungarian news outlet published an article citing Prime Minister Viktor Orbán as saying that the Hungarian state "will cure everyone", a claim at odds with healthcare workers' reports that capacity in Hungarian hospitals was limited and resources were scarce. [1] However, there is no evidence in Hungarian or international news media that any senior Hungarian leaders have shared misinformation or disinformation about COVID-19 itself, or any other infectious disease.

[1] HVG. 24 September 2020. "Orbán "cures everyone", but there are hospitals where they talk about Bergamo-level drama already". ("Orbán „mindenkit meggyógyít”, de van kórház, ahol már a bergamói drámát emlegetik"). [https://hvg.hu/360/202039__jarvanyugyi_keszultseg__eloszurt_szavak__teszt_hatosagi_ar__korhazi_vagyszam]. Accessed 6 November 2020

3.6 ACCESS TO COMMUNICATIONS INFRASTRUCTURE

3.6.1 Internet users

3.6.1a

Percentage of households with Internet

Input number

Current Year Score: 80.37

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: 106.07

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: 1.0

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: 2.0

2019

Gallup; Economist Impact calculation

3.7 TRADE AND TRAVEL RESTRICTIONS

3.7.1 Trade restrictions

3.7.1a

In the past year, has the country issued a restriction, without international/bilateral support, on the export/import of medical goods (e.g. medicines, oxygen, medical supplies, PPE) due to an infectious disease outbreak?

Yes = 0 , No = 1

Current Year Score: 0

In the past year Hungary has issued a restriction, without international support, on the export of medical goods due to an infectious disease outbreak. During the COVID-19 pandemic, in March 2020, Hungary banned the export of

hydroxychloroquine sulfate and drugs that contain it. The government declared that “as Hungary is one of the world’s largest exporters of this ingredient, the protection and medical supply of the Hungarian population is now a priority”. [1] The law, titled "Decree 64/2020. on the measures related to the export of certain medicines in a state of emergency instated to prevent a human infectious event and its effects, that could endanger lives and goods, and to protect the health and life of Hungarian citizens" was in effect until the end of the first state of emergency, which started on 11 March 2020 and ended on 17 June 2020. [2] [3]

[1] Reuters. 25 March 2020. "Hungary bans export of coronavirus treatment ingredient".

[<https://www.reuters.com/article/us-health-coronavirus-hungary-medicine-idUSKBN21C2FR>]. Accessed 5 November 2020

[2] Hungarian Official Gazette. 25 March 2020. "Decree 64/2020. on the measures related to the export of certain medicines in a state of emergency instated to prevent a human infectious event and its effects, that could endanger lives and goods, and to protect the health and life of Hungarian citizens". ("64/2020. (III. 25.) Korm. rendelet az élet-és vagyonbiztonságot veszélyeztető tömeges megbetegedést okozó humánjárvány megelőzése, illetve következményeinek elhárítása, a magyar állampolgárok egészségének és életének megóvása érdekében elrendelt veszélyhelyzet során egyes gyógyszerek kivételével kapcsolatos intézkedésekről").

[<https://magyarkozlony.hu/dokumentumok/3a9bb4dd60f29b56f6e28fad90112d1c2e65295d/megtekintes>]. Accessed 12 November 2020

[3] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "282/2020. (VI. 17.) Government Decree on the lifting the state of emergency declared on 11 March 2020". ("282/2020. (VI. 17.) Korm. rendelet a 2020. március 11-én kihirdetett veszélyhelyzet megszüntetéséről"). [<https://net.jogtar.hu/jogszabaly?docid=A2000282.KOR>]. Accessed 12 November 2020.

3.7.1b

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

Yes = 0 , No = 1

Current Year Score: 1

There is no evidence that Hungary has in the past year restricted, without international/bilateral support, the the export or import of non-medical goods due to an infectious disease outbreak. There is no evidence of such restrictions in the Hungarian or international media, or on the websites of the Ministry of Human Capacities, Ministry of Foreign Affairs and Trade, Ministry of Agriculture, National Center for Public Health or the National Public Health and Medical Officer Service. [1] [2] [3] [4] [5]

[1] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-minisztariuma>]. Accessed 6 November 2020.

[2] Ministry of Foreign Affairs and Trade. [<https://kormany.hu/kulgaszdasagi-es-kulugyminiszterium>] Accessed 6 November 2020.

[3] Ministry of Agriculture (Agrárminisztérium). [<https://kormany.hu/agrarminiszterium>]. Accessed 6 November 2020.

[4] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>]. Accessed 6 November 2020.

[5] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat [<https://www.antsz.hu/>]) Accessed 6 November 2020.

3.7.2 Travel restrictions

3.7.2a

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

Yes = 0, No = 1

Current Year Score: 0

Within the past year, Hungary has implemented a ban, without international or bilateral support, on travelers arriving from specific countries due to an infectious disease outbreak. On 17 March 2020, during the COVID-19 pandemic, the 27 member states of the European Union (EU) agreed to ban entry into the EU from all other countries (except for EU citizens, British citizens and people who live in the EU or the United Kingdom). [1] Since then the EU ban has been periodically reviewed, and entry has been allowed from certain non-EU countries. [2] In September 2020, as the COVID-19 pandemic continued, Hungary unilaterally banned all non-Hungarian citizens from entering the country. [3] It later introduced relaxations into the law, like allowing commuters more freedom, creating passages for international travellers and allowing citizens of Slovakia, the Czech Republic and Poland to enter with negative COVID-19 tests. [3] The restriction prompted the European Commission to address a letter to the Hungarian government, urging it not to discriminate against European Union (EU) citizens. [4] The EU's Home Affairs Commissioner, Ylva Johansson stressed that measures that do not comply with those fundamental principles of EU law should be immediately retracted. [4]

[1] Deutsche Welle. 18 March 2020. "EU closes borders to foreigners to halt coronavirus spread: What to know." [https://www.dw.com/en/eu-closes-borders-to-foreigners-to-halt-coronavirus-spread-what-to-know/a-52824499]. Accessed 7 August 2020.

[2] Deutsche Welle. 30 June 2020. "EU agrees to reopen borders to 14 countries, extends travel ban for US tourists." [https://www.dw.com/en/eu-agrees-to-reopen-borders-to-14-countries-extends-travel-ban-for-us-tourists/a-53986435]. Accessed 7 August 2020.

[3] Hungarian Consulate in Subotica. September 2020. "As of September 1, 2020, the rules for entering Hungary have changed". ("2020. szeptember 1-től módosultak a Magyarországra történő belépés szabályai"). [https://szabadka.mfa.gov.hu/news/2020-szeptember-1-tol-modosulnak-a-magyarorszagra-toerteno-belepes-szabalyai]. Accessed 6 November 2020.

[4] Schengen Visa Info. 2 September 2020. "EU Commission Urges Hungary to Terminate Discriminatory Border Measures". [https://www.schengenvisa.info.com/news/eu-commission-urges-hungary-to-terminate-discriminatory-border-measures/]. Accessed 6 November 2020.

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

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

4.1.1 Available human resources for the broader healthcare system

4.1.1a

Doctors per 100,000 people

Input number

Current Year Score: 340.75

2018

WHO; national sources

4.1.1b

Nurses and midwives per 100,000 people

Input number

Current Year Score: 691.57

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: 0

There is a health workforce strategy in place, but it has not been updated in the past five years. Hungary monitors and audits the healthcare workforce, but primarily for the purposes of licensing. The last comprehensive human resource strategy for healthcare workers, the Human Resource Strategy of Healthcare, dates back to 2010. [1] The current healthcare strategy, "Healthy Hungary 2014–2020" (adopted 2014, and not updated since) mentions an intention to increase the supply of general practitioners, but not the healthcare workforce comprehensively. [2] As for physician workforce planning, "Healthy Hungary 2014–2020" establishes indicators and proposes concrete measures to ensure there is an appropriate amount of physicians with the required licences and skillset at all levels of public healthcare (including dental care) in Hungary. [2]

[1] Healthcare Professionals Training and Advanced Training Institute (Egészségügyi Szakképző és Továbbképző Intézet). 2010. "Human Resource Strategy of Healthcare" ("Az egészségügy humán erőforrás stratégiája")

[<https://docplayer.hu/866460-Az-egeszsegugy-human-eroforras-strategiaja-munkapeldany.html>]. Accessed 1 November 2020.

[2] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). 2014. "Healthy Hungary 2014-2020. Healthcare Strategy" ("Egészséges Magyarország 2014-2020. Egészségügyi Ágazati Stratégia").

[<https://www.aEEK.hu/documents/20182/0/Eg%C3%A9szs%C3%A9ges+Magyarorsz%C3%A1g+strat%C3%A9gia/af67e108-7f2e-437c-bf2f-d16590cf3a7f>]. Accessed 1 November 2020.

4.1.2 Facilities capacity

4.1.2a

Hospital beds per 100,000 people

Input number

Current Year Score: 701

2018

WHO/World Bank; national sources

4.1.2b

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

Yes = 1 , No = 0

Current Year Score: 1

There is evidence that Hungary has the capacity to isolate patients with highly communicable diseases in a biocontainment patient care unit or patient isolation facility located within the country. Decree No. 18/1998 of the Minister for Public Health on Preventive Epidemic Measurements of Infectious Diseases and Epidemics regulates all aspects of isolation. [1] All hospitals are required to be able to isolate patients with infections in single-bed wards with a lock system including hand wash, hand disinfectant and disposable hand towels between the locks. [2] Wards have connected bathrooms. All regional healthcare centres are required to equip patient isolation units with a negative pressure exhaustor at the entrance. [2] There is, however, no evidence that such isolation capacity exists, or that hospitals are capable of isolating and treating patients with highly communicable diseases. Such evidence is not available on the websites of the Ministry of Human Capacities, the National Public Health and Medical Officer Service, the Health Centre of the Hungarian Armed Forces, the Clinic of the University of Debrecen, or the Clinic of the Faculty of Medicine at the University of Szeged. [3] [4] [5] [6] [7] There is no evidence in the media either: during the COVID-19 pandemic, in March 2020, Cecília Müller, Chief Medical Officer, said that there was enough capacity to isolate patients in single bed rooms in hospitals and other buildings, but did not mention biocontainment units or isolation facilities. [8] In the Human Rights Watch report on the Hungarian healthcare's unpreparedness, the healthcare system is criticised for not having enough single bed rooms and not following isolation protocols, and there is no mention of any kinds of biocontainment units. [9]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree No. 18/1998 of the Minister for Public Health on Preventive Epidemic Measurements of Infectious Diseases and Epidemics" ("18/1998. (VI. 3.) NM rendelet a fertőző betegségek és a járványok megelőzése érdekében szükséges járványügyi intézkedésekről").

[<https://net.jogtar.hu/jogszabaly?docid=99800018.nm>]. Accessed 1 November 2020.

[2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree No. 60/2003 of the Minister for Health,

Social Affairs and Family on Professional Minimal Requirements on Providing Medical Services" ("60/2003. (X. 20.) ESzCsM rendelet az egészségügyi szolgáltatások nyújtásához szükséges szakmai minimumfeltételekről").

[https://net.jogtar.hu/jogszabaly?docid=a0300060.esc]. Accessed 1 November 2020.

[3] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [http://www.kormany.hu/hu/emberi-eroforrasok-minisztériuma]. Accessed 1 November 2020.

[4] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat).

[https://www.antsz.hu]. Accessed 1 November 2020.

[5] Health Centre of the Hungarian Armed Forces (Magyar Honvédség Egészségügyi Központ).

[http://www.honvedkorhaz.hu/]. Accessed 1 November 2020.

[6] Clinics at the University of Debrecen (Debreceni Egyetem Klinikai Központ). [https://klinikaikozpont.unideb.hu/]. Accessed 1 November 2020.

[7] Faculty of Medicine at the University of Szeged (Szegedi Tudományegyetem Egyetem Általános Orvostudományi Kar).

"Clinics" ("Klinikák"). [http://www.med.u-szeged.hu/karunkrol/klinikak/klinikak]. Accessed 1 November 2020.

[8] Index. 08 March 2020 "How does quarantine look in practice?". ("Hogy néz ki a gyakorlatban a karantén?")

[https://index.hu/techtud/2020/03/08/koronavirus_karanten_jarvanyugyi_elkulonites_izolacio_megfigyeles_zarlat_fertozes_jarvany/]. Accessed 9 November 2020.

[9] Human Rights Watch. 05 August 2020. "Hungary: deficiencies of the healthcare system endanger lives" ("Magyarország: Életeket veszélyeztetnek az egészségügy hiányosságai"). [https://www.hrw.org/hu/news/2020/08/05/375919]. Accessed 9 November 2020.

4.1.2c

Does the country meet one of the following criteria?

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

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Hungary has, in the past two years, demonstrated capacity to expand isolation capacity or developed, updated or tested a plan to expand isolation capacity in response to an outbreak. There is no such information on the websites of the Ministry of Human Capacities, the National Public Health and Medical Officer Service, the Health Center of the Hungarian Armed Forces, the Clinics at the University of Debrecen, or the Faculty of Medicine at the University of Szeged. [1, 2, 3, 4, 5]

[1] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [http://www.kormany.hu/hu/emberi-eroforrasok-minisztériuma]. Accessed 29 April 2021.

[2] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat).

[https://www.antsz.hu]. Accessed 29 April 2021.

[3] Health Centre of the Hungarian Armed Forces (Magyar Honvédség Egészségügyi Központ).

[http://www.honvedkorhaz.hu/]. Accessed 29 April 2021.

[4] Clinics at the University of Debrecen (Debreceni Egyetem Klinikai Központ). [https://klinikaikozpont.unideb.hu/]. Accessed 29 April 2021.

[5] Faculty of Medicine at the University of Szeged (Szegedi Tudományegyetem Egyetem Általános Orvostudományi Kar).

"Clinics" ("Klinikák"). [http://www.med.u-szeged.hu/karunkrol/klinikak/klinikak]. Accessed 29 April 2021

4.2 SUPPLY CHAIN FOR HEALTH SYSTEM AND HEALTHCARE WORKERS

4.2.1 Routine health care and laboratory system supply

4.2.1a

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

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

Current Year Score: 2

There is a national procurement protocol in place, which can be utilized by the ministries responsible for health and agriculture for the acquisition of laboratory supplies and medical supplies for routine needs. The Law CXLIII of 2015 on Public Procurements establishes national procurement protocols. [1] The National Public Procurement Agency facilitates all public procurements, including acquisitions for laboratory and medical supplies. [2] All ongoing tenders and acquisitions are available online. [3] The Ministry of Human Capacities and the Ministry of Agriculture are required to use the system by article 5 (1) a) of Law CXLIII of 2015 on Public Procurements. [1]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Law CXLIII of 2015 on Public Procurements" ("2015. évi CXLIII. törvény a közbeszerzésekről"). [<https://net.jogtar.hu/jogszabaly?docid=A1500143.TV>]. Accessed 5 November 2020.

[2] National Public Procurement Agency (Közbeszerzési Hatóság). "National Public Procurement Agency" ("Közbeszerzési Hatóság"). [<http://www.kozbeszerzes.hu/kozbeszerzesi-szervezetek/#kozbeszerzesi-hatosag>]. Accessed 5 November 2020.

[3] National Public Procurement Agency (Közbeszerzési Hatóság). "Public Procurement Notification: Announcements" ("Közbeszerzési Értesítő - Hirdetmények"). [<https://www.kozbeszerzes.hu/kozbeszerzes-z/#hirdetmenyek/>]. Accessed 5 November 2020.

4.2.2 Stockpiling for emergencies

4.2.2a

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

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

Current Year Score: 1

Hungary has a stockpile of medical supplies (e.g. MCMs, medicines, vaccines, medical equipment, PPE) for national use during a public health emergency, but there is limited evidence of what the stockpile contains. The National Healthcare Supply Center is the successor of the National Supply Center and manages the National Healthcare Reserve, according to article 3 of the Government Decree 27/2015 about the National Supply Center. [1] [2] [3] Articles 1 and 2 of the 1/2016 Ministry of Human Capacities Decree on the Rules for the Management of the National Healthcare Reserve requires the stockpiling of medical countermeasures, "medical technology equipment" and "other tools and materials". [4] "Medical technology equipment" is defined in Law CLIV of 1997 on Healthcare, Article 3 h) as "any apparatus, equipment, material, software or other product, whether used alone or in combination with another product, including software necessary for its proper functioning, which is intended by the manufacturer specifically for diagnostic or therapeutic purposes, and custom-

made devices, and also devices intended for clinical examination, as specified by the manufacturer, for use on humans or on samples of human origin". [5] However, the Law on Healthcare does not name specific supplies that are required to be stocked, or specific quantities thereof. [4] Article 16 (4) of Decree 18/1998 on Epidemiological Measures to Prevent Communicable Diseases and Epidemics puts the Chief Medical Officer in charge of the vaccines that the National Healthcare Reserve has to have on stock, but does not list specific vaccines. [6]

Stocks are small and shortages can occur. In March 2020, early in the COVID-19 pandemic, medical personnel reported a lack of personal protective equipment (PPE), such as FFP2 masks, protective suits and goggles. [7] Later stocks were resupplied, for example on 4 May 2020 the Hungarian Foreign Minister declared that on that week Hungary received 16.14 million items of PPE, including face shields, gloves, protective suits, plus an additional 17,516,000 masks. [8] In April 2018 it was reported that parents had to pay for multiple mandatory vaccines, as the stock the government provides for free ran out. [9] Such vaccines include the combined measles, mumps, rubella vaccine, sold as Priorix, vaccine against rotavirus, other combined vaccines for children but also vaccines against Hepatitis B or HPV. [9] In January 2019 it was reported that stocks of Vaxigrip Tetra flu vaccine ran out. [10]

[1] Health Inventory Management. (Egészségügyi Készletgazdálkodási Intézet) [<http://www.eki.hu/aeut.html>]. Accessed 6 November 2020.

[2] National Supply Center (Állami Egészségügyi Ellátó Központ). "Instrument, stock sales and rental". ("Műszer-, készletértékesítés és bérbeadás"). [<https://www.aEEK.hu/keszletgazdalkodas>]. Accessed 6 November 2020.

[3] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Government Decree 27/2015 about the National Supply Center". (" 27/2015. (II. 25.) Korm. rendelet az Állami Egészségügyi Ellátó Központról"). [<https://net.jogtar.hu/jogszabaly?docid=A1500027.KOR>] Accessed 6 November 2020.

[4] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "1/2016 Ministry of Human Capacities Decree on the rules for the management of the National Health Reserve". ("1/2016. (I. 13.) EMMI rendelet az Állami Egészségügyi Tartalékkal való gazdálkodás szabályairól") [<https://net.jogtar.hu/jogszabaly?docid=A1600001.EMM>]. Accessed 6 November 2020.

[5] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Law CLIV of 1997 on Healthcare" ("1997. évi CLIV. törvény az egészségügyről"). [<https://net.jogtar.hu/jogszabaly?docid=99700154.TV>]. Accessed 7 November 2020.

[6] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Decree 18/1998. on epidemiological measures to prevent communicable diseases and epidemics". ("18/1998. (VI. 3.) NM rendelet a fertőző betegségek és a járványok megelőzése érdekében szükséges járványügyi intézkedésekről") [<https://net.jogtar.hu/jogszabaly?docid=99800018.nm>]. Accessed 7 November 2020.

[7] 444.hu. 12 March 2020. "The squeezed out Hungarian healthcare faces coronavirus without supplies.". ("Tartalékok nélkül néz szembe az eleve kifacsart magyar egészségügy a koronavírussal"). [<https://444.hu/2020/03/13/tartalekok-nelkul-nez-szembe-az-eleve-kifacsart-magyar-egeszsegugy-a-koronavirussal>]. Accessed 12 November 2020.

[8] Information page on the coronavirus. 04 May 2020. "Szájzártó: more than 17.5 million masks arrived in Hungary last week". ("Szájzártó: több mint 17,5 millió maszk érkezett Magyarországra az elmúlt héten"). [<https://koronavirus.gov.hu/cikkek/szajzarto-tobb-mint-175-millio-maszk-erkezett-magyarorszagra-az-elmult-heten>]. Accessed 12 November 2020.

[9] Napi. 1 April 2018. "Big trouble with vaccinations - there are some who already have to pay". ("Nagy a baj a védőoltásoknál - van, akinek már fizetni kell"). [https://www.napi.hu/magyar_gazdasag/nagy_a_baj_a_vedooltasoknal_van_akinek_mar_fizetni_kell.659736.html]. Accessed 13 November 2020.

[10] Egészség Kalauz. 23 January 2019. "Four-component flu vaccine has run out". ("Elfogyott az influenza elleni négykomponensű oltóanyag"). [<https://www.egeszsegkalauz.hu/betegsegek/leguti-betegsegek/elfogyott-az-influenza-elleni-negykomponensu-oltoanyag/c2tv4hv>] Accessed 13 November 2020.

4.2.2b

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

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

Current Year Score: 0

There is insufficient evidence that Hungary has a stockpile of laboratory supplies. Article 3 of Law CLIV of 1997 on Healthcare defines medical technology equipment as “any apparatus, equipment, material, software or other product, whether used alone or in combination with another product, including software necessary for its proper functioning, which is intended by the manufacturer specifically for diagnostic or therapeutic purposes, and custom-made devices, and also devices intended for clinical examination, as specified by the manufacturer, for use on humans or on samples of human origin”. [1] Article 3 (5) of the 1/2016 Ministry of Human Capacities Decree on the Rules for the Management of the National Health Reserve says that modifying the list of medical technology equipments has to be approved by the Ministry, based on data provided by the National Ambulance Service and inpatient facilities, and after consulting with healthcare organizations. It does not discuss quantities or the nature of the medical technology equipment in stock, however. [2] No evidence found on the sites of Ministry of Human Capacities, National Center for Public Health or the National Public Health and Medical Officer Service. [3] [4] [5]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. “Law CLIV of 1997 on Healthcare” (“1997. évi CLIV. törvény az egészségügyről”). [<https://net.jogtar.hu/jogszabaly?docid=99700154.TV>]. Accessed 31 October 2020.

[2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. “1/2016 Ministry of Human Capacities Decree on the rules for the management of the National Health Reserve”. (“1/2016. (I. 13.) EMMI rendelet az Állami Egészségügyi Tartalékkal való gazdálkodás szabályairól”) [<https://net.jogtar.hu/jogszabaly?docid=A1600001.EMM>]. Accessed 6 November 2020.

[3] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-minisztériuma>]. Accessed 6 November 2020.

[4] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>]. Accessed 6 November 2020.

[5] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat [<https://www.antsz.hu/>]) Accessed 6 November 2020.

4.2.2c

Is there evidence that the country conducts or requires an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency?

Yes = 1, No = 0

Current Year Score: 1

Hungary requires an annual review of the national stockpile to ensure the supply is sufficient for a public health emergency. Paragraph 10 of the 1/2016 Ministry of Human Capacities Decree on the rules for the management of the National Health Reserve demands that the National Supply Center conduct a yearly review of the stockpile and sends a report to the minister of human capacities before 1 March, containing a review of the stocking activity, changes in the quantity, components and value of the stockpile. The report must also include proposals for the development of the reserve. [1]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. “1/2016 Ministry of Human Capacities Decree on the rules for the management of the National Health Reserve”. (“1/2016. (I. 13.) EMMI rendelet az Állami Egészségügyi

Tartalékkal való gazdálkodás szabályairól") [<https://net.jogtar.hu/jogszabaly?docid=A1600001.EMM>]. Accessed 29 April 2021.

4.2.3 Manufacturing and procurement for emergencies

4.2.3a

Does the country meet one of the following criteria?

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

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

Current Year Score: 1

Hungary has an agreement to procure medical supplies for national use during a public health emergency, but there is no evidence of plans or agreements to leverage domestic capacity to produce medical supplies.

Hungary is part of the European Union (EU) Joint Procurement Agreement to produce medical countermeasures, which ensures that EU member states have access to medical countermeasures from abroad if necessary when a serious cross-border threat to health is registered. [1] [2] The agreement aims to "secure more equitable access to specific medical countermeasures and improved security of supply", as well as balancing prices for EU members. [2] It is also designed to ensure acquisition of vaccines, antivirals and medical countermeasures for serious cross-border threats to health. [2]

During the COVID-19 pandemic, Hungary took measures to produce masks: one machine was purchased in April (and later criticized for its inflated price and much lower production capacity than announced) and one in July 2020. [3] [4] In March Hungary bought 3 million masks, 100,000 tests, 86 ventilators from China and in April 4 million masks, 400,000 protective suits, 100,000 safety goggles, 30,000 pairs of gloves and 6 thousands face protecting shields. [5] [6] However, there is no evidence that any of these efforts were based on a pre-existing plan, agreement or mechanism. [3] [4] [5] [6]

There is no evidence that Hungary has a plan, program, or guideline to leverage domestic manufacturing capacity to produce medical supplies for national use during a public health emergency on the websites of the Ministry of Human Capacities, National Center for Public Health or National Public Health and Medical Officer Service. [7] [8] [9]

[1] European Commission. "Joint Procurement Agreement - List of EU countries".

[https://ec.europa.eu/health/preparedness_response/joint_procurement/jpa_signature_en]. Accessed 8 November 2020.

[2] European Commission. "Joint Procurement of medical countermeasures".

[https://ec.europa.eu/health/preparedness_response/joint_procurement_en]. Accessed 8 November 2020.

[3] HVG. 2 October 2020. "The machine that cannot produce 2.8 million masks a month cost 210 million" ("210 millióba került a gép, ami mégsem tud havonta 2,8 millió maszkot gyártani").

[https://hvg.hu/gazdasag/20201002_maszkgyarto_gep_hadhazy_akos_bvop]. Accessed 8 November 2020

[4] Information page on the coronavirus. (Tájékoztató oldal a koronavírusról). "A new mask producing machine starts operating in Budapest". ("Új maszkgyártó gép kezdte meg működését Budapesten"). [<https://koronavirus.gov.hu/cikkek/uj-maszkgyarto-gep-kezde-meg-mukodeset-budapesten>]. Accessed 8 November 2020

[5] HVG. 24 March 2020. "Orban: 3 million masks and 86 ventilators have arrived from China". ("Orbán: 3 millió maszk és 86 lélegeztetőgép jött Kínából").

[https://hvg.hu/itthon/20200324_orban_viktor_kina_szallitmany_arcmaszk_maszk_lelegeztetogep_szallitmany]. Accessed 8 November 2020.

[6] Krónika. 04 April 2020. "4 million masks, more than 400,000 protective suits and special medicines have arrived in Hungary from China". ("Magyarországra 4 millió maszk, több mint 400 ezer védőruházt és speciális gyógyszer érkezett Kínából") [<https://kronikaonline.ro/kulfold/magyarorszagra-4-millio-maszk-tobb-mint-400-ezer-vedoruhazat-es-specialis-gyogyszer-erkezett-kinabol>]. Accessed 8 November 2020.

[7] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-minisztériuma>]. Accessed 6 November 2020.

[8] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>]. Accessed 6 November 2020.

[9] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat [<https://www.antsz.hu/>]) Accessed 6 November 2020.

4.2.3b

Does the country meet one of the following criteria?

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

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

Current Year Score: 0

There is no public evidence that Hungary has a plan or agreement to leverage domestic manufacturing capacity to produce laboratory supplies or that there is a plan or mechanism to procure laboratory supplies. There is no evidence of this, or of on increasing production capacity or buying supplies during the COVID-19 pandemic, in the media or on the websites of Ministry of Human Capacities, National Center for Public Health or the National Public Health and Medical Officer Service. [1] [2] [3]

[1] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-minisztériuma>]. Accessed 6 November 2020.

[2] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>]. Accessed 6 November 2020.

[3] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat [<https://www.antsz.hu/>]) Accessed 6 November 2020.

4.3 MEDICAL COUNTERMEASURES AND PERSONNEL DEPLOYMENT

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

4.3.1a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence that Hungary has a plan, program, or guidelines in place for dispensing medical countermeasures for national use during a public health emergency. The National Public Health Emergency Response Plan (NPHERP) regulates the

distribution of medical countermeasures for national use during a public health emergency, but it is not publicly available. [1][3] Article 10 of the Government Decree No. 512/2013 on Public Health Emergency guarantees that medicines, medical materials and equipment be stockpiled and ready for prompt disposal the National Healthcare Reserve, and states that the National Healthcare Supply Centre is responsible for the process of distribution, but does not mention a plan, program or guidelines relating to dispensing. [1] [2]. There is no evidence of guidelines for dispensing countermeasures on the websites of the Ministry of Human Capacities, the National Public Health and Medical Officer Service, the Ministry of Defence, and the National Directorate General for Disaster Management, or the Ministry of the Interior. [4] [5] [6] [7]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Government Decree No. 512/2013 on Public Health Emergency ("512/2013. (XII. 30.) Korm. rendelet az egészségügyi válsághelyzeti ellátásról").

[https://net.jogtar.hu/jogszabaly?docid=a1300521.kor]. Accessed 1 November 2020.

[2] National Healthcare Supply Centre (Állami Egészségügyi Ellátó Központ). "National Healthcare Reserve" ("Állami Egészségügyi Tartalék"). [http://www.eki.hu/aeut.html]. Accessed 1 November 2020.

[3] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "Emergencies" (Veszélyhelyzetek). [https://www.antsz.hu/felso_menu/temaink/veszelyhelyzetek]. Accessed 1 November 2020.

[4] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [http://www.kormany.hu/hu/emberi-eroforrasok-minisztariuma]. Accessed 1 November 2020.

[5] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). [https://www.antsz.hu]. Accessed 1 November 2020.

[6] Ministry of Defence (Honvédelmi Minisztérium). [http://www.kormany.hu/hu/honvedelmi-minisztarium]. Accessed 1 November 2020.

[7] National Directorate General for Disaster Management, Ministry of the Interior (Belügyminisztérium Oszágos Katasztrófavédelmi Főigazgatóság). "Organization" ("Szervezet"). [https://www.katasztrofavedelem.hu/7/szervezet]. Accessed 1 November 2020.

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

4.3.2a

Is there a public plan in place to receive health personnel from other countries to respond to a public health emergency?

Yes = 1 , No = 0

Current Year Score: 1

There is evidence of a plan to receive health personnel from other countries to respond to a public health emergency in Hungary. Hungary has a bilateral agreement with Austria on providing mutual aid in case of emergencies. Although health emergencies are not specified, the agreement covers emergencies more broadly and includes provision of medical aid. Among other procedures to facilitate response logistics, the agreement includes details on how to ease requirements for border crossings and import and export of emergency supplies needed by response teams for the sake of emergency response. [1] Although there is evidence of additional mechanisms for sharing health personnel, there is no evidence of other agreements outlining plans for how to facilitate their arrival to Hungary. Hungary participates in the European Union (EU) Civil Protection Mechanism, but does not participate in the European Emergency Response Capacity or in the European Medical Corps. [2, 3, 4] Chapter IV of the Government Decree No. 234/2011 on Execution of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws regulates how Hungary provides and requests international disaster assistance, but does not specifically mention health personnel. [5] The National Directorate General for Disaster Management at Ministry of the Interior (NDGDM) has broad bilateral, regional and international contacts, but there is no evidence of a focus on receiving health personnel. [6] The international relations of NDGDM are mostly technical in nature

and focus on disaster management. NDGDM represents Hungary at expert fora at the United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA), the European Union (EU), the North Atlantic Treaty Organization (NATO) and the International Association of Fire and Rescue Services (CTIF). No evidence of a relevant plan was found on the websites of the Ministry of Defence or Ministry of Human Capacities. [7, 8]

- [1] National Council of Austria. 1998. "Agreement between the Republic of Austria and the Republic of Hungary on mutual assistance with disasters or serious accidents." ("Abkommen zwischen der Republik Österreich und der Republik Ungarn über die gegenseitige Hilfeleistung bei Katastrophen oder schweren Unglücksfällen.") [https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10011105]. Accessed 8 August 2020.
- [2] European Commission (EC). 2020. "EU Civil Protection Mechanism". [http://ec.europa.eu/echo/what/civil-protection/mechanism_en]. Accessed 1 November 2020.
- [3] European Commission (EC). 2020. "European Emergency Response Capacity". [https://ec.europa.eu/echo/what/civil-protection/european-emergency-response-capacity_en]. Accessed 1 November 2020.
- [4] European Commission (EC). 2018. "European Medical Corps". [https://ec.europa.eu/echo/what-we-do/civil-protection/european-medical-corps_en]. Accessed 1 November 2020.
- [5] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Government Decree No. 234/2011 on Execution of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws" ("234/2011. (XI. 10.) Korm. rendelet a katasztrófavédelemről és a hozzá kapcsolódó egyes törvények módosításáról szóló 2011. évi CXXVIII. törvény végrehajtásáról"). [https://net.jogtar.hu/jogszabaly?dbnum=1&doid=A1100234.KOR&mahu=1]. Accessed 1 November 2020.
- [6] National Directorate General for Disaster Management, Ministry of the Interior (Belügyminisztérium Országos Katasztrófavédelmi Főigazgatóság). "International Relations" ("Nemzetközi kapcsolatok"). [https://www.katasztrofavedelem.hu/12/nemzetkozi-kapcsolatok]. Accessed 1 November 2020.
- [7] Ministry of Defence (Honvédelmi Minisztérium). [https://kormany.hu/honvedelmi-miniszterium]. Accessed 1 November 2020.
- [8] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [http://www.kormany.hu/hu/emberi-eroforrasok-miniszteriuma]. Accessed 1 November 2020.

4.4 HEALTHCARE ACCESS

4.4.1 Access to healthcare

4.4.1a

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

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

Current Year Score: 0

2020

World Policy Analysis Center

4.4.1b

Access to skilled birth attendants (% of population)

Input number

Current Year Score: 99.2

2014

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: 532.35

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 of legislation, a policy or a public statement committing the Hungarian government to provide prioritized healthcare services to healthcare workers who become sick as a result of responding to a public health emergency. Hungary's public healthcare system is available for all citizens. [1] Membership in the Hungarian social insurance scheme is obligatory for all citizens. [2] The National Public Health Emergency Response Plan (NPERP) deals specifically with emergency preparedness in public health, and reportedly has an annex on ensuring sufficient emergency response capacity, including sufficient healthcare workers, but the NPERP is not publicly available and there is no evidence that it provides prioritized healthcare to healthcare workers. [3] [4] There is no evidence of a relevant policy on the website of the Ministry of Human Capacities. [5]

- [1] National Health Insurance Fund of Hungary (Nemzeti Egészségbiztosítási Alapkezelő). 2020. "Healthcare" ("Egészségügyi ellátások"). [http://www.neak.gov.hu/felso_menu/lakossagnak/ellatas_magyarorszagon/egeszsegugyi_ellatasok]. Accessed 1 November 2020.
- [2] National Health Insurance Fund of Hungary (Nemzeti Egészségbiztosítási Alapkezelő). "Persons Entitled to Social Security Services" ("Az egészségbiztosítás szolgáltatásaira jogosultak"). [http://www.neak.gov.hu/felso_menu/lakossagnak/ellatas_magyarorszagon/jogosultsag_az_ellatasra/az_egeszsegbiztositas_szolgáltatasa_jogosultak]. Accessed 1 November 2020.
- [3] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "Emergencies" (Veszélyhelyzetek"). [https://www.antsz.hu/felso_menu/temaink/veszelyhelyzetek]. Accessed 1 November 2020.
- [4] Government Office (Kormányhivatal). "Institutional Questions of Civil Protection and Defence Planning" ("A katasztrófavédelmi és honvédelmi tervezés intézményi kérdései"). [http://www.kormanyhivatal.hu/download/e/40/73000/Csehi%20G%C3%A1bor%20-%20A%20katasztr%C3%B3fav%C3%A9delmi%20%C3%A9s%20honv%C3%A9delmi%20tervez%C3%A9s%20int%C3%A9zm%C3%A9nyi%20k%C3%A9rd%C3%A9sei.pdf]. Accessed 1 November 2020.
- [5] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [http://www.kormany.hu/hu/emberi-eroforrasok-miniszteriuma]. Accessed 1 November 2020.

4.5 COMMUNICATIONS WITH HEALTHCARE WORKERS DURING A PUBLIC HEALTH EMERGENCY

4.5.1 Communication with healthcare workers

4.5.1a

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Hungary has a system in place for public health officials and healthcare workers to communicate during a public health emergency. [1] The National Public Health Emergency Response Plan (NIPHERP) deals specifically with emergency preparedness in public health, and reportedly has an annex containing a communication plan, but the NIPHERP is not publicly available and there is no evidence that it creates a system for public health officials and healthcare workers to communicate. [2] [3] There is no evidence of a system for public health officials and healthcare workers to communicate on the websites of the National Center for Public Health or the National Public Health and Medical Officer Service. [4] [5]

- [1] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [http://www.kormany.hu/hu/emberi-eroforrasok-miniszteriuma]. Accessed 1 November 2020.
- [2] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "Emergencies" (Veszélyhelyzetek"). [https://www.antsz.hu/felso_menu/temaink/veszelyhelyzetek]. Accessed 1 November 2020.
- [3] Government Office (Kormányhivatal). "Institutional Questions of Civil Protection and Defence Planning" ("A katasztrófavédelmi és honvédelmi tervezés intézményi kérdései"). [http://www.kormanyhivatal.hu/download/e/40/73000/Csehi%20G%C3%A1bor%20-%20A%20katasztr%C3%B3fav%C3%A9delmi%20%C3%A9s%20honv%C3%A9delmi%20tervez%C3%A9s%20int%C3%A9zm%C3%A9nyi%20k%C3%A9rd%C3%A9sei.pdf]. Accessed 1 November 2020.
- [4] National Center for Public Health (Nemzeti Népegészségügyi Központ). [https://www.nnk.gov.hu/]. Accessed 12

November 2020.

[5] National Public Health and Medical Officer Service. (Állami Népegészségügyi és Tisztiorvosi Szolgálat [https://www.antsz.hu/] Accessed 12 November 2020.

4.5.1b

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

Yes = 1 , No = 0

Current Year Score: 0

There is no public evidence that Hungary has a system in place for public health officials and healthcare workers in both the public and private sectors to communicate during a public health emergency. As per article 6 of the Government Decree No. 521/2013, the same regulations apply to all private and public medical providers in Hungary when preparing for or managing public health emergencies in Hungary. [1] The National Public Health Emergency Response Plan (NPHERP) deals specifically with emergency preparedness in public health, and reportedly has an annex containing a communication plan, but the NPHERP is not publicly available and there is no evidence that it creates a system for public health officials and healthcare workers to communicate. [2] [3] There is no evidence on the websites of the Ministry of Human Capacities, National Center for Public Health or National Public Health and Medical Officer Service either. [4] [5] [6]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Government Decree No. 521/2013 on the Management of Public Health Emergency" ("521/2013. (XII. 30.) Korm. rendelet az egészségügyi válsághelyzeti ellátásról"). [https://net.jogtar.hu/jogszabaly?docid=a1300521.kor]. Accessed 1 November 2020.

[2] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "Emergencies" (Veszélyhelyzetek). [https://www.antsz.hu/felso_menu/temaink/veszelyhelyzetek]. Accessed 1 November 2020.

[3] Government Office (Kormányhivatal). "Institutional Questions of Civil Protection and Defence Planning" ("A katasztrófavédelmi és honvédelmi tervezés intézményi kérdései").

[http://www.kormanyhivatal.hu/download/e/40/73000/Csehi%20G%C3%A1bor%20-%20A%20katasztr%C3%B3fav%C3%A9delmi%20%C3%A9s%20honv%C3%A9delmi%20tervez%C3%A9s%20int%C3%A9zm%C3%A9nyi%20k%C3%A9rd%C3%A9sei.pdf]. Accessed 1 November 2020.

[4] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [http://www.kormany.hu/hu/emberi-eroforrasok-minisztériuma]. Accessed 6 November 2020.

[5] National Center for Public Health (Nemzeti Népegészségügyi Központ). [https://www.nnk.gov.hu/]. Accessed 6 November 2020.

[6] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat [https://www.antsz.hu/] Accessed 6 November 2020.

4.6 INFECTION CONTROL PRACTICES AND AVAILABILITY OF EQUIPMENT

4.6.1 Healthcare associated infection (HCAI) prevention and control programs

4.6.1a

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

Yes = 1 , No = 0

Current Year Score: 1

There is a national public health system that monitors for and tracks the number of healthcare-associated infections in healthcare facilities in Hungary. Hungary's National Nosocomial Surveillance System (NNSS) tracks, among other things, the antibiotic resistance of multi-resistant pathogens such as staphylococcus aureus, Enterobacter spp., Escherichia coli, Klebsiella spp., Klebsiella pneumoniae, other Enterobacteriaceae, Acinetobacter baumannii, Pseudomonas aeruginosa and Stenotrophomonas maltophilia. [2] NNSS is a system of the National Professional Information System (NEPIS), which integrates and tracks all healthcare surveillance data, and is operated by the Chief Medical Officer, who is the head of the National Public Health and Medical Officer Service subordinated to the Ministry of Human Capacities. [3] [4]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Decree No. 20/2009 of the Minister for Health on the Prevention of Healthcare-Associated Infections, its Professional Minimal Requirements and Surveillance" ("20/2009. (VI. 18.) EüM rendelet az egészségügyi ellátással összefüggő fertőzések megelőzéséről, e tevékenységek szakmai minimumfeltételeiről és felügyeletéről"). [https://net.jogtar.hu/jogszabaly?docid=a0900020.eum]. Accessed 1 November 2020.

[2] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "National Nosocomial Surveillance System 2017 Annual Report" ("A Nemzeti Nosocomiális Surveillance Rendszer 2017. évi eredményeiről"). [https://www.antsz.hu/data/cms88661/NNSR_2017.pdf]. Accessed 1 November 2020.

[3] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "NPIS" ("OSZIR"). [https://www.antsz.hu/oszir]. Accessed 1 November 2020.

[4] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). 2015. "About Us" ("Rólunk"). [https://www.antsz.hu/felso_menu/rolunk]. Accessed 1 November 2020.

4.7 CAPACITY TO TEST AND APPROVE NEW MEDICAL COUNTERMEASURES

4.7.1 Regulatory process for conducting clinical trials of unregistered interventions

4.7.1a

Is there a national requirement for ethical review (e.g., from an ethics committee or via Institutional Review Board approval) before beginning a clinical trial?

Yes = 1, No = 0

Current Year Score: 1

There is a national requirement for ethical review in Hungary. Government Decree No. 235/2009 on Approving Rules of Medical Trials on Humans, on Clinical Trials of Experimental Drugs Applied on Humans and on Clinical Trials of Experimental Medical Equipments sets out the national requirements for ethical review before beginning a clinical trial. [1] The ethical review consists of at least two independent approvals. [1] The first one is institutional. The second one is a national review board approval at one or more national review boards of the Medical Research Council. [2]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Government Decree No. 235/2009 on the Approval Rules of Medical Trials on Humans, on Clinical Trials of Experimental Drugs Applied on Humans and on Clinical Trials of Experimental Medical Equipments" ("235/2009. (X. 20.) Korm. rendelet az emberen végzett orvostudományi kutatások, az emberi felhasználásra kerülő vizsgálati készítmények klinikai vizsgálata, valamint az emberen történő alkalmazásra szolgáló, klinikai vizsgálatra szánt orvostechnikai eszközök klinikai vizsgálata engedélyezési eljárásának szabályairól").

[<https://net.jogtar.hu/jogszabaly?docid=a0900235.kor>]. Accessed 1 November 2020.

[2] Medical Research Council (Egészségügyi Tudományos Tanács). “National Review Boards” (Szakmai-Etikai Bizottságok”). [<https://ett.aek.hu/>]. Accessed 1 November 2020.

4.7.1b

Is there an expedited process for approving clinical trials for unregistered medical countermeasures (MCM) to treat ongoing epidemics?

Yes = 1, No = 0

Current Year Score: 0

There is no expedited process for approving clinical trials for unregistered medical countermeasures in Hungary. The general deadline for approving clinical trials is 75 days from the date of application, while the deadline for approving clinical trials using genetic therapy or somatic cell therapy is 90 days, and for clinical trials using xenogeny cell therapy, the approval deadline is 12 months. [1] Clinical trials are regulated by the European Directive 2001/20/EC, which is fully implemented in the Hungarian regulation relating to clinical trials on medicinal products for human use. [2] The legislation covers applicant registration, authorisation processes, the silent agreement principle in the authorisation process, and transparency. [2] [3] There is no evidence for expedited process on the sites of the Ministry of Human Capacities and Ministry of Innovation and Technology. [4] [5]

[1] National Institute of Pharmacy and Nutrition (“Országos Gyógyszerészeti és Élelmezés-egészségügyi Intézet). “Approval Deadlines for Clinical Trials”. (“A klinikai vizsgálat engedélyezési eljárásának ügyintézési határideje”).

[<https://www.ogyei.gov.hu/page.php?item=603>]. Accessed 1 November 2020.

[2] European Commission (EC). “Clinical Trials”. [https://ec.europa.eu/health/human-use/clinical-trials/directive_sv]. Accessed 1 November 2020.

[3] National Institute of Pharmacy and Nutrition (“Országos Gyógyszerészeti és Élelmezés-egészségügyi Intézet). “Approving New Clinical Trials”. (“Új klinikai vizsgálat engedélyezése”). [https://www.ogyei.gov.hu/uj_klinikai_vizsgalat/]. Accessed 1 November 2020.

[4] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-minisztariuma>]. Accessed 1 November 2020.

[5] Ministry of Innovation and Technology (Innovációs és Technológiai Minisztérium).

[<http://www.kormany.hu/hu/innovacios-es-technologiai-minisztarium>]. Accessed 1 November 2020.

4.7.2 Regulatory process for approving medical countermeasures

4.7.2a

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

Yes = 1, No = 0

Current Year Score: 1

Hungary has a government agency responsible for approving new medical countermeasures. The National Institute of Pharmacy and Nutrition (NIPN) is responsible for approving new medical countermeasures for humans in Hungary. [1] The NIPN regulates the manufacture, import, export, storage, distribution and sale of therapeutic goods, which includes drugs, cosmetics, medical devices, alternative medicines and other health and hygiene products. [1]

[1] National Institute of Pharmacy and Nutrition ("Országos Gyógyszerészeti és Élelmezés-egészségügyi Intézet). "About Us" („Magunkról"). [<https://www.ogyei.gov.hu/magunkrol/>]. Accessed 1 November 2020.

4.7.2b

Is there an expedited process for approving medical countermeasures (MCM) for human use during public health emergencies?

Yes = 1 , No = 0

Current Year Score: 1

There is an expedited process for approving medical countermeasures for human use in special cases. Article 7 (1) of the Law XCV of 2005 on Amendments to Laws Regulating the Pharmaceutical Market and Medicinal Products for Human Use states that in special cases, medicines can be licensed for sale before the end of trials, with a license limited to one year. [1] Article 7 (2) of the same law allows this limited licensing if the medicine is needed to stop a public health concern caused by pathogens, toxins, chemical agents or nuclear radiation that is deemed especially dangerous to the population. [1]

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. " Law XCV of 2005 on Amendments to Laws Regulating the Pharmaceutical Market and Medicinal Products for Human Use". ("2005. évi XCV. törvény az emberi alkalmazásra kerülő gyógyszerekről és egyéb, a gyógyszerpiacot szabályozó törvények módosításáról"). [<https://net.jogtar.hu/jogszabaly?docid=a0500095.tv>]. Accessed 9 November 2020

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

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

5.1.1 Official IHR reporting

5.1.1a

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

Yes = 1 , No = 0

Current Year Score: 1

2020

World Health Organization

5.1.2 Integration of health into disaster risk reduction

5.1.2a

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

Yes = 1, No = 0

Current Year Score: 0

There is no evidence of a national risk reduction strategy for pandemics in Hungary. Law CXXVIII of 2011 on Disaster Management and on the Amendment of Certain Related Laws does not establish a national risk reduction strategy but a comprehensive Central Disaster Response Plan (CDRP). [1] The CDRP, as per article 31 of Government Decree No. 234/2011 on Execution of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws, focuses on disaster management and on minimizing harm from disasters, but not on how to reduce the overall vulnerability to emergencies and threats. [2] The CDRP itself is not publicly available. [3] According the Ministry of Human Resources, the National Public Health Emergency Response Plan (NPHERP), which deals specifically with emergency preparedness in public health, has an annex on vulnerability data related to public health emergencies, but the NPHERP is not publicly available. [4][5][6] There is no further relevant evidence on the website of the Ministry of Human Capacities. [7]

- [1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Law CXXVIII of 2011 on Disaster Management and on the Amendment of Certain Related Laws ("2011. évi CXXVIII. törvény a katasztrófavédelemről és a hozzá kapcsolódó egyes törvények módosításáról"). [<https://net.jogtar.hu/jogszabaly?docid=A1100128.TV>]. Accessed 1 November 2020.
- [2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Government Decree No. 234/2011 on Execution of Law CXXVIII of 2011 on Civil Protection and on the Amendment of Related Laws" ("234/2011. (XI. 10.) Korm. rendelet a katasztrófavédelemről és a hozzá kapcsolódó egyes törvények módosításáról szóló 2011. évi CXXVIII. törvény végrehajtásáról"). [<https://net.jogtar.hu/jogszabaly?dbnum=1&docid=A1100234.KOR&mahu=1>] Accessed 1 November 2020.
- [3] National Directorate General for Disaster Management, Ministry of the Interior (Belügyminisztérium, Országos Katasztrófavédelmi Főigazgatóság). [<http://www.katasztrofavedelem.hu>]. Accessed 1 November 2020.
- [4] Government Office (Kormányhivatal). "Institutional Questions of Civil Protection and Defence Planning" ("A katasztrófavédelmi és honvédelmi tervezés intézményi kérdései"). [<http://www.kormanyhivatal.hu/download/e/40/73000/Csehi%20G%C3%A1bor%20-%20A%20katasztr%C3%B3fav%C3%A9delmi%20%C3%A9s%20honv%C3%A9delmi%20tervez%C3%A9s%20int%C3%A9zm%C3%A9nyi%20k%C3%A9rd%C3%A9sei.pdf>]. Accessed 1 November 2020.
- [5] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Kft. 2020. "Government Decree No. 512/2013 on Public Health Emergency ("521/2013. (XII. 30.) Korm. rendelet az egészségügyi válsághelyzeti ellátásról"). [<https://net.jogtar.hu/jogszabaly?docid=a1300521.kor>]. Accessed 1 November 2020.
- [6] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "Emergencies" (Veszélyhelyzetek"). [https://www.antsz.hu/felso_menu/temaink/veszelyhelyzetek]. Accessed 1 November 2020.
- [7] Ministry of Human Resources (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-minisztariuma>]. Accessed 1 November 2020.

5.2 CROSS-BORDER AGREEMENTS ON PUBLIC HEALTH AND ANIMAL HEALTH EMERGENCY RESPONSE

5.2.1 Cross-border agreements

5.2.1a

Does the country have cross-border agreements, protocols, or MOUs with neighboring countries, or as part of a regional group, with regards to public health emergencies?

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

Current Year Score: 2

Hungary has cross-border agreements, as part of a regional group, with regards to public health emergencies, and there is no evidence of gaps in implementation. As a member state of the European Union (EU), Hungary is one of the stakeholders of the European Centre for Disease Prevention and Control (ECDC). The ECDC, among other responsibilities, provides support to EU member states during public health emergencies. [1] [2] In addition, within the EU, the Health Security Committee (HSC) provides a platform for the health ministries of member states (including Hungary) to coordinate national responses to cross-border public health emergencies. [3] [4] Hungary also has bilateral agreements on mutual assistance in response to catastrophes and major accidents with neighbouring Austria, Slovakia, Romania, Serbia and Ukraine, as well as North Macedonia, Moldova and the Czech Republic. [5] [6] [7] [8] [9] [10] [11] [12] These define catastrophes as events that could or do threaten lives, health or goods; they do not explicitly mention public health emergencies, but they do include medical aid.

[1] European Centre for Disease Prevention and Control. "ECDC activities on epidemic intelligence and outbreak response". [<https://www.ecdc.europa.eu/en/about-us/what-we-do/ecdc-activities-epidemic-intelligence-and-outbreak-response>]. Accessed 1 November 2020.

[2] European Centre for Disease Prevention and Control. "Preparedness". [<https://ecdc.europa.eu/en/about-us/what-we-do/preparedness>]. Accessed 1 November 2020.

[3] European Commission. "Health Security Committee members". [https://ec.europa.eu/health/preparedness_response/risk_management/hsc/members_en]. Accessed 1 November 2020.

[4] European Union (EU). 2013. "Decision No 1082/2013/EU of the European Parliament and of the Council of 22 October 2013 on serious cross-border threats to health and repealing Decision No 2119/98/EC". [https://ec.europa.eu/health/sites/health/files/preparedness_response/docs/decision_serious_crossborder_threats_22102013_en.pdf]. Accessed 1 November 2020.

[5] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "2001 XXIX. Act promulgating the Convention between the Republic of Hungary and the Czech Republic on Cooperation and Mutual Assistance in the Event of Catastrophes and Major Accidents, signed in Budapest on 17 June 1999" ("2001. évi XXIX. törvény a Magyar Köztársaság és a Cseh Köztársaság között a katasztrófák és súlyos balesetek esetén történő együttműködésről és kölcsönös segítségnyújtásról szóló, Budapest, 1999. június 17-én aláírt Egyezmény kihirdetéséről").

[<https://net.jogtar.hu/jogszabaly?docid=A0100029.TV&searchUrl=/gyorskereso%3Fkeyword%3Dk%25C3%25B6lcs%25C3%25B6n%25C3%25B6s%2520seg%25C3%25ADts%25C3%25A9gny%25C3%25BAjt%25C3%25A1s>] Accessed 9 November 2020.

[6] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "1999 CXII. Act promulgating the Convention between the Republic of Hungary and the Republic of Austria on Mutual Assistance in the Event of Catastrophes or Serious Accidents". ("1999. évi CXII. törvény a Magyar Köztársaság és az Osztrák Köztársaság között a katasztrófák vagy súlyos szerencsétlenségek esetén történő kölcsönös segítségnyújtásról szóló Egyezmény kihirdetéséről").

[<https://net.jogtar.hu/jogszabaly?docid=99900112.TV>]. 9 November 2020.

[7] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "212/1997. (XII. 1.) Government Decree on the

promulgation of the Convention between the Government of the Republic of Hungary and the Government of the Slovak Republic on Cooperation and Mutual Assistance in the Event of Catastrophes". ("212/1997. (XII. 1.) Korm. rendelet a Magyar Köztársaság Kormánya és a Szlovák Köztársaság Kormánya között katasztrófák esetén történő együttműködésről és kölcsönös segítségnyújtásról szóló Egyezmény kihirdetéséről"). [<https://net.jogtar.hu/jogszabaly?docid=99700212.KOR>]. Accessed 9 November 2020.

[8] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. "2004 LXXXI. law on the promulgation of the Convention between the Government of the Republic of Hungary and the Government of Romania on Cooperation and Mutual Assistance in the Event of Catastrophes, signed in Budapest on 9 April 2003". ("2004. évi LXXXI. törvény a Magyar Köztársaság Kormánya és Románia Kormánya között a katasztrófák esetén történő együttműködésről és kölcsönös segítségnyújtásról szóló, Budapesten, 2003. április 9. napján aláírt Egyezmény kihirdetéséről").

[<https://net.jogtar.hu/jogszabaly?docid=A0400081.TV>]. 2020. Accessed 9 November 2020.

[9] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "2013 CXCVII. Act on the promulgation of the Convention between the Government of Hungary and the Government of the Republic of Serbia on Cooperation and Mutual Assistance in the Event of Catastrophes". ("2013. évi CXCVII. törvény a Magyarország Kormánya és a Szerb Köztársaság Kormánya között a katasztrófák esetén történő együttműködésről és kölcsönös segítségnyújtásról szóló Egyezmény kihirdetéséről"). [<https://net.jogtar.hu/jogszabaly?docid=A1300197.TV>]. Accessed 9 November 2020.

[10] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "CXLIII of 2009 Act promulgating the Convention between the Government of the Republic of Hungary and the Government of the Republic of Macedonia on Cooperation and Mutual Assistance in the Event of Catastrophes". ("2009. évi CXLIII. törvény a Magyar Köztársaság Kormánya és a Macedón Köztársaság Kormánya között, a katasztrófák esetén történő együttműködésről és kölcsönös segítségnyújtásról szóló Egyezmény kihirdetéséről"). [<https://net.jogtar.hu/jogszabaly?docid=A0900143.TV>]. Accessed 9 November 2020.

[11] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "1998 LV. Act on the promulgation of the Agreement between the Republic of Hungary and Ukraine on the Order of the Hungarian-Ukrainian State Border, Cooperation and Mutual Assistance in Border Matters, signed in Kiev on 19 May 1995". ("1998. évi LV. törvény a Magyar Köztársaság és Ukrajna között a magyar-ukrán államhatár rendjéről, a határkérdésekben való együttműködésről és kölcsönös segítségnyújtásról szóló, Kijevben, 1995. május 19-én aláírt Szerződés kihirdetéséről").

[<https://net.jogtar.hu/jogszabaly?docid=99800055.TV>]. Accessed 9 November 2020

[12] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Act I of 2019 on the promulgation of the Convention between the Government of Hungary and the Government of the Republic of Moldova on Cooperation and Mutual Assistance in the Event of Catastrophes". ("2019. évi I. törvény a Magyarország Kormánya és a Moldovai Köztársaság Kormánya között a katasztrófák esetén történő együttműködésről és kölcsönös segítségnyújtásról szóló egyezmény kihirdetéséről"). [<https://net.jogtar.hu/jogszabaly?docid=A1900001.TV>]. Accessed 9 November 2020

5.2.1b

Does the country have cross-border agreements, protocols, or MOUs with neighboring countries, or as part of a regional group, with regards to animal health emergencies?

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

Current Year Score: 2

Hungary has cross-border agreements, as part of a regional group, with regards to animal health emergencies, and there is no evidence of gaps in implementation. As a European Union (EU) member state, Hungary is entitled to request assistance from the Veterinary Emergency Team. [1] [2] The members of this team are experts in "veterinary sciences, virology, wildlife, laboratory testing, risk management and other relevant areas". [1] It was established by the European Commission and works in coordination with the EU's Community Reference Laboratory. [2] The Veterinary Emergency Team has carried out five emergency missions in Hungary to combat Bluetongue in October 2015, African Swine Fever in June 2016, April 2017, and

April 2018, and Avian Influenza in December 2016. [3]

[1] European Commission. "Veterinary Emergency Team". [https://ec.europa.eu/food/animals/animal-diseases/emergency-team_en]. Accessed 1 November 2020.

[2] European Commission. 2007. "Decision No 2007/142/EC". [<https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32007D0142&from=EN>]. Accessed 1 November 2020.

[3] European Commission. 2018. "Community Veterinary Emergency Team missions". [https://ec.europa.eu/food/sites/food/files/animals/docs/ad_emergency_cvet_experts_missions.pdf]. Accessed 1 November 2020.

5.3 INTERNATIONAL COMMITMENTS

5.3.1 Participation in international agreements

5.3.1a

Does the county have signatory and ratification (or same legal effect) status to the Biological Weapons Convention?

Signed and ratified (or action having the same legal effect) = 2, Signed = 1, Non-compliant or not a member = 0

Current Year Score: 2

2021

Biological Weapons Convention

5.3.1b

Has the country submitted confidence building measures for the Biological Weapons Convention in the past three years?

Yes = 1, No = 0

Current Year Score: 1

2021

Biological Weapons Convention

5.3.1c

Has the state provided the required United Nations Security Council Resolution (UNSCR) 1540 report to the Security Council Committee established pursuant to resolution 1540 (1540 Committee)?

Yes = 1, No = 0

Current Year Score: 1

2021

Biological Weapons Convention

5.3.1d

Extent of United Nations Security Council Resolution (UNSCR) 1540 implementation related to legal frameworks and enforcement for countering biological weapons:

Very good (60+ points) = 4, Good (45–59 points) = 3, Moderate (30–44 points) = 2, Weak (15–29 points) = 1, Very weak (0–14 points) or no matrix exists/country is not party to the BWC = 0

Current Year Score: 4

2021

Biological Weapons Convention

5.3.2 Voluntary memberships

5.3.2a

Does the country meet at least 2 of the following criteria?

- Membership in Global Health Security Agenda (GHSA)
- Membership in the Alliance for Country Assessments for Global Health Security and IHR Implementation (JEE Alliance)
- Membership in the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction (GP)
- Membership in the Australia Group (AG)
- Membership in the Proliferation Security Initiative (PSI)

Needs to meet at least two of the criteria to be scored a 1 on this measure. , Yes for five = 1 , Yes for four = 1 , Yes for three = 1 , Yes for two = 1 , Yes for one = 0 , No for all = 0

Current Year Score: 1

2021

Global Health Security Agenda; JE Alliance; Global Partnership; Australia Group; PSI

5.4 JOINT EXTERNAL EVALUATION (JEE) AND PERFORMANCE OF VETERINARY SERVICES PATHWAY (PVS)

5.4.1 Completion and publication of a Joint External Evaluation (JEE) assessment and gap analysis

5.4.1a

Has the country completed a Joint External Evaluation (JEE) or precursor external evaluation (e.g., GHSA pilot external assessment) and published a full public report in the last five years?

Yes = 1 , No = 0

Current Year Score: 0

2021

WHO Strategic Partnership for IHR and Health Security (SPH); Global Health Security Agenda

5.4.1b

Has the country completed and published, within the last five years, either a National Action Plan for Health Security (NAPHS) to address gaps identified through the Joint External Evaluation (JEE) assessment or a national GHSA roadmap that sets milestones for achieving each of the GHSA targets?

Yes = 1 , No = 0

Current Year Score: 0

2021

WHO Strategic Partnership for IHR and Health Security (SPH); Global Health Security Agenda

5.4.2 Completion and publication of a Performance of Veterinary Services (PVS) assessment and gap analysis

5.4.2a

Has the country completed and published a Performance of Veterinary Services (PVS) assessment in the last five years?

Yes = 1 , No = 0

Current Year Score: 0

2021

OIE PVS assessments

5.4.2b

Has the country completed and published a Performance of Veterinary Services (PVS) gap analysis in the last five years?

Yes = 1 , No = 0

Current Year Score: 0

2021

OIE PVS assessments

5.5 FINANCING

5.5.1 National financing for epidemic preparedness

5.5.1a

Is there evidence that the country has allocated national funds to improve capacity to address epidemic threats within the past three years?

Yes = 1 , No = 0

Current Year Score: 1

There is evidence that Hungary has allocated national funds to improve production capacity to address epidemic threats within the past three years. The National Statistics Office's 2003-2018 data show that Hungary's healthcare spending is

declining. [1] On 11 June 2019 economists told a national daily paper that the recently proposed national budget did not give the slightest indication that the government was concerned about the problems of healthcare. [2] In August 2020 Human Rights Watch published an article saying that "longstanding neglect by the government has left the Hungarian public healthcare system under-prepared to handle the Covid-19 pandemic". [3] However, recognising weak domestic production capacity in fighting epidemic threats, the Hungarian government launched a domestically funded grant program in August 2020 for Hungarian healthcare producers aimed at improving domestic production and supply of medicines, personal protective equipment, or those that, during an emergency, can switch quickly to produce healthcare related products. It was explicitly stated that the program aims to prepare the country for any future healthcare situations. The program had a budget of US\$ 166.7 million, but on 9 November 2020 Gábor Gion, State Secretary for Financial Policy Affairs in the Ministry of Finance, said they plan to increase the total sum of the program because of the great interest and because Hungary aims to have more medical products produced domestically than the current 20%. [4] [5]

[1] National Statistics Office. "2.4.1. Changes in healthcare spending (2003-)" ("2.4.1. Egészségügyi kiadások alakulása (2003-)"). [https://www.ksh.hu/docs/hun/xstadat/xstadat_eves/i_fec001b.html] Accessed 6 November 2020

[2] Népszava. 11 June 2019. "Again no miracle in health care next year" ("Jövőre is elmarad a csoda az egészségügyben"). [https://nepszava.hu/3039055_jovore-is-elmarad-a-csoda-az-egeszsegugyben] Accessed 6 November 2020

[3] Human Rights Watch. 04 August 2020. "<https://www.hrw.org/news/2020/08/04/hungary-health-care-failures-endanger-lives>" [<https://www.hrw.org/news/2020/08/04/hungary-health-care-failures-endanger-lives>]. Accessed on 6 November 2020

[4] Government of Hungary. 09 November 2020. "Funding for the Healthcare industry Program could be expanded". ("Bővíthet az Egészségipari Támogatási Program kerete"). [<https://kormany.hu/hirek/bovulhet-az-egeszsegipari-tamogatasi-program-kerete>] Accessed on 12 November 2020

[5] VG. 30 July 2020. "The government offers support for the development of domestic healthcare manufacturers". ("A hazai egészségipari gyártók fejlesztésére támogatást nyújt a kormány"). [<https://www.vg.hu/kozelet/egeszsegugy-kozelet/a-hazai-egeszsegipari-gyartok-fejlesztese-re-tamogatast-nyujt-a-kormany-2603441/>] Accessed 12 November 2020

5.5.2 Financing under Joint External Evaluation (JEE) and Performance of Veterinary Services (PVS) reports and gap analyses

5.5.2a

Does the Joint External Evaluation (JEE) report, National Action Plan for Health Security (NAPHS), and/or national GHSA roadmap allocate or describe specific funding from the national budget (covering a time-period either in the future or within the past five years) to address the identified gaps?

Yes = 1 , No/country has not conducted a JEE = 0

Current Year Score: 0

2021

WHO Strategic Partnership for IHR and Health Security (SPH); Global Health Security Agenda

5.5.2b

Does the Performance of Veterinary Services (PVS) gap analysis and/or PVS assessment allocate or describe specific funding from the national budget (covering a time-period either in the future or within the past five years) to address the identified gaps?

Yes = 1 , No/country has not conducted a PVS = 0

Current Year Score: 0

2021

OIE PVS assessments

5.5.3 Financing for emergency response

5.5.3a

Is there a publicly identified special emergency public financing mechanism and funds which the country can access in the face of a public health emergency (such as through a dedicated national reserve fund, an established agreement with the World Bank pandemic financing facility/other multilateral emergency funding mechanism, or other pathway identified through a public health or state of emergency act)?

Yes = 1, No = 0

Current Year Score: 1

Hungary has a special emergency public financing mechanism, which can be accessed in case of a public health emergency. As per article 10 of the Government Decree No. 521/2013 on the Management of Public Health Emergency, the National Healthcare Reserve, which has its own emergency financial mechanism coordinated by the minister responsible for public health, will finance and supply medicine, medical material and equipment in case of a public health emergency in Hungary. [1] [2] Hungary also participates in the European Union (EU) Civil Protection Mechanism, which may also financially assist the response to a public health emergency in Hungary. [3] Hungary is not eligible for funding from the World Bank's Pandemic Emergency Financing Facility and is not eligible for support from the International Development Association [4, 5, 6].

[1] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2020. "Government Decree No. 521/2013 on the Management of Public Health Emergency" ("521/2013. (XII. 30.) Korm. rendelet az egészségügyi válsághelyzeti ellátásról"). [<https://net.jogtar.hu/jogszabaly?docid=a1300521.kor>]. Accessed 1 November 2020.

[2] National Healthcare Supply Centre (Állami Egészségügyi Ellátó Központ). "National Healthcare Reserve" ("Állami Egészségügyi Tartalék"). [<http://www.eki.hu/aeut.html>]. Accessed 1 November 2020.

[3] European Commission (EC). 2018. "EU Civil Protection Mechanism". [http://ec.europa.eu/echo/what/civil-protection/mechanism_en]. Accessed 1 November 2020.

[4] World Bank. 1 November 2019. "Pandemic Emergency Financing Facility: Frequently Asked Questions". [www.worldbank.org/en/topic/pandemics/brief/pandemic-emergency-facility-frequently-asked-questions]. Accessed 28 October 2020.

[5] World Bank. 2017. "Pandemic Financing Facility". [<http://pubdocs.worldbank.org/en/119961516647620597/PEF-Operational-Brief-Dec-2017.pdf>]. Accessed 28 October 2020.

[6] International Development Association. "Borrowing Countries." [<https://ida.worldbank.org/about/borrowing-countries>]. Accessed 28 October 2020.

5.5.4 Accountability for commitments made at the international stage for addressing epidemic threats

5.5.4a

Is there evidence that senior leaders (president or ministers), in the past three years, have made a public commitment either to:

- Support other countries to improve capacity to address epidemic threats by providing financing or support?

- Improve the country's domestic capacity to address epidemic threats by expanding financing or requesting support to improve capacity?

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

Current Year Score: 0

There is no evidence of Hungary's senior leaders making commitments in the past three years to support other countries to improve capacity by providing support, and there is no evidence of them making commitments to obtain funds to improve domestic capacity. Commitments in the past year have focused solely on response to the COVID-19 pandemic. During the pandemic, the minister of foreign affairs and trade, Péter Szijjártó, pledged to support other countries, particularly in the Western Balkans, with face masks, protective suits and ventilators. He also said that he had agreed to set up a EUR 250,000 (USD 295,000) solidarity fund within the International Visegrad Fund for the benefit of six countries: Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine. [1] There is no evidence of Hungary's senior leaders requesting support in the media or on the websites of the Ministry of Human Capacities, National Center for Public Health or the National Public Health and Medical Officer Service. [2] [3] [4]

[1] Hungary Today. 9 April 2020. "Coronavirus: Hungary Provides 600,000 Face Masks, Protective Clothing to CEE Countries, Szijjártó Pledges Further Help". [<https://hungarytoday.hu/coronavirus-hungary-face-masks-protective-clothing-cee-countries-szijjarto-help/>] Accessed 5 November 2020

[2] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-miniszteriuma>]. Accessed 13 November 2020.

[3] National Center for Public Health (Nemzeti Népegészségügyi Központ). [<https://www.nnk.gov.hu/>]. Accessed 13 November 2020.

[4] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat [<https://www.antsz.hu/>]) Accessed 13 November 2020.

5.5.4b

Is there evidence that the country has, in the past three years, either:

- Provided other countries with financing or technical support to improve capacity to address epidemic threats?
- Requested financing or technical support from donors to improve the country's domestic capacity to address epidemic threats?

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

Current Year Score: 0

There is insufficient evidence that Hungary has, in the past three years, provided support to other countries to improve capacity to address epidemic threats, or invested external funds to improve domestic capacity. During the COVID-19 pandemic, Hungary has made commitments towards other countries, but these were supporting direct response to the pandemic rather than capacity improvements. The minister of foreign affairs and trade, Péter Szijjártó, said that Hungary had already assisted Serbia, Croatia, Slovenia, North Macedonia and Republika Srpska with 600,000 masks and 30,000 pieces of protective clothing. [1] The European Solidarity Tracker shows that in April 2020 Hungary provided Croatia with masks and protective suits, and provided medical personnel to the European Union's Althea mission to Bosnia. [2] There is no further relevant evidence on the websites of the Ministry of Human Capacities, the National Center for Public Health, the National Public Health and Medical Officer Service or the Global Health Security Tracking Dashboard. [3, 4, 5, 6]

[1] United Nations Office for the Coordination of Humanitarian Affairs. Relief Web. 9 April 2020."COVID-19: Hungary is continuing to help countries in need". [<https://reliefweb.int/report/world/covid-19-hungary-continuing-help-countries-need>]. Accessed 5 November 2020

[2] European Council on Foreign Relations. 11 June 2020. "European Solidarity Tracker".

[https://ecfr.eu/special/solidaritytracker/] Accessed 5 November 2020

[3] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [http://www.kormany.hu/hu/emberi-eroforrasok-minisztériuma]. Accessed 13 November 2020.

[4] National Center for Public Health (Nemzeti Népegészségügyi Központ). [https://www.nnk.gov.hu/]. Accessed 13 November 2020.

[5] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat [https://www.antsz.hu/] Accessed 13 November 2020.

[6] Global Health Security Tracking Dashboard. "Hungary". [https://tracking.ghscosting.org/details/963/funder]. Accessed 24 June 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: 1

2021

Economist Impact analyst qualitative assessment based on official national sources, which vary by country

5.6 COMMITMENT TO SHARING OF GENETIC AND BIOLOGICAL DATA AND SPECIMENS

5.6.1 Commitment to sharing genetic data, clinical specimens, and/or isolated specimens (biological materials) in both emergency and nonemergency research

5.6.1a

Is there a publicly available plan or policy for sharing genetic data, clinical specimens, and/or isolated specimens (biological materials) along with the associated epidemiological data with international organizations and/or other countries that goes beyond influenza?

Yes = 1 , No = 0

Current Year Score: 0

There is no publicly available evidence of a plan or policy for Hungary to share genetic data, clinical specimens or isolated specimens with international entities. European Union (EU) Regulation 2016/679 establishes extra safeguards on processing and transmitting genetic, biometric and health data, which are complemented by Law CXII of 2011 on the Rights of Information Self-Determination and of Freedom of Information in Hungary. [1] [2] Hungary has committed to share epidemiological surveillance data continuously with the EU and its member states. The Annex of Decision No 1082/2013/EU has established the communicable diseases and related special health issues that are to be notified to the European Centre for Disease Prevention and Control. [3] The Ministry of Human Capacities publishes weekly (and annual) reports on the epidemic status in Hungary by sub-national units (counties). [4] The reports include all cases of notifiable communicable diseases recorded during the current period in Hungary as well as other issues relevant for Hungary's epidemic status. The National Food Chain Security Office participates in and informs on numerous international warning and alert systems. [5] However, there is no evidence of a plan or policy for Hungary to share genetic data, clinical specimens or isolated specimens,

including on the websites of the Ministry of Human Capacities, Ministry of Agriculture and Ministry of Innovation and Technology. [6] [7] [8]

- [1] Official Journal of the European Union (EU). 2016. "Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (Text with EEA relevance)". L 119. [<https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32016R0679&from=EN>]. Accessed 1 November 2020.
- [2] Catalogue of National Legislations (Jogtár) of Wolters Kluwer Ltd. 2018. "Law CXII of 2011 on the Rights of Information Self-Determination and of Freedom of Information" ("2011. évi CXII. törvény az információs önrendelkezési jogról és az információszabadságról"). [<https://net.jogtar.hu/jogszabaly?docid=A1100112.TV>]. Accessed 1 November 2020.
- [3] Official Journal of the European Union (EU). 2013. "Decision No 1082/2013/EU of the European Parliament and the Council of 22 October 2013 on serious cross-border threats to health and repealing Decision No 2119/98/EC (Text with EEA relevance)". L 293. [<https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32013D1082&from=en>]. Accessed 1 November 2020.
- [4] National Public Health and Medical Officer Service (Állami Népegészségügyi és Tisztiorvosi Szolgálat). "Weekly Data on Infectious Diseases" ("Fertőző betegségek heti adatai"). [https://www.antsz.hu/felso_menu/temaink/jarvany/Fertozo_betegsegek/fertozo]. Accessed 1 November 2020.
- [5] National Food Chain Security Office (Nemzeti Élelmiszerlánc-biztonsági Hivatal). "International warning and alert systems" ("Nemzetközi riasztási rendszerek"). [<http://portal.nebih.gov.hu/nemzetkozi-riasztasi-rendszerek>]. Accessed 1 November 2020.
- [6] Ministry of Human Capacities (Emberi Erőforrások Minisztériuma). [<http://www.kormany.hu/hu/emberi-eroforrasok-minisztariuma>]. Accessed 1 November 2020.
- [7] Ministry of Agriculture (Agrárminisztérium). [<https://kormany.hu/agrarminisztarium>]. Accessed 1 November 2020.
- [8] Ministry of Innovation and Technology (Innovációs és Technológiai Minisztérium). [<http://www.kormany.hu/hu/innovacios-es-technologiai-minisztarium>]. Accessed 1 November 2020.

5.6.1b

Is there public evidence that the country has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past two years?

Yes = 0 , No = 1

Current Year Score: 1

There is no public evidence that Hungary has not shared samples in accordance with the Pandemic Influenza Preparedness (PIP) framework in the past two years. The World Health Organization has not reported any non-compliance in the past two years by Hungary. [1]

- [1] World Health Organisation (WHO). "Influenza: Virus Sharing". [http://www.who.int/influenza/pip/virus_sharing/en/]. Accessed 5 November 2020.

5.6.1c

Is there public evidence that the country has not shared pandemic pathogen samples during an outbreak in the past two years?

Yes = 0 , No = 1

Current Year Score: 1

There is no public evidence that Hungary has not shared pandemic pathogen samples during an outbreak in the past two years. The World Health Organization has not reported any non-sharing in the past two years by Hungary. [1] [2] [3] There are no media reports indicating that Hungary did not share pandemic pathogen samples, including of COVID-19.

[1] World Health Organization (WHO). "Hungary". [<http://www.who.int/countries/hun/en/>]. Accessed 5 November 2020.

[2] World Health Organization (WHO). 2018. "Hungary: Publications".

[<http://www.euro.who.int/en/countries/hungary/publications>]. Accessed 5 November 2020.

[3] World Health Organization (WHO). 2018. "Hungary: News".

[http://www.euro.who.int/en/countries/hungary/news/news/news?root_node_selection=73687]. Accessed 5 November 2020.

Category 6: Overall risk environment and vulnerability to biological threats

6.1 POLITICAL AND SECURITY RISK

6.1.1 Government effectiveness

6.1.1a

Policy formation (Economist Intelligence score; 0-4, where 4=best)

Input number

Current Year Score: 2

2020

Economist Intelligence

6.1.1b

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

Input number

Current Year Score: 2

2020

Economist Intelligence

6.1.1c

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

Input number

Current Year Score: 3

2020

Economist Intelligence

6.1.1d

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

Input number

Current Year Score: 1

2020

Economist Intelligence

6.1.1e

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

Input number

Current Year Score: 44

2020

Transparency International

6.1.1f

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

Input number

Current Year Score: 3

2020

Economist Intelligence

6.1.1g

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

Input number

Current Year Score: 3

2020

Economist Intelligence

6.1.2 Orderly transfers of power

6.1.2a

How clear, established, and accepted are constitutional mechanisms for the orderly transfer of power from one government to another?

Very clear, established and accepted = 4, Clear, established and accepted = 3, One of the three criteria (clear, established, accepted) is missing = 2, Two of the three criteria (clear, established, accepted) are missing = 1, Not clear, not established, not accepted = 0

Current Year Score: 3

2021

Economist Intelligence

6.1.3 Risk of social unrest

6.1.3a

What is the risk of disruptive social unrest?

Very low: Social unrest is very unlikely = 4, Low: There is some prospect of social unrest, but disruption would be very limited = 3, Moderate: There is a considerable chance of social unrest, but disruption would be limited = 2, High: Major social unrest is likely, and would cause considerable disruption = 1, Very high: Large-scale social unrest on such a level as to seriously challenge government control of the country is very likely = 0

Current Year Score: 3

2021

Economist Intelligence

6.1.4 Illicit activities by non-state actors

6.1.4a

How likely is it that domestic or foreign terrorists will attack with a frequency or severity that causes substantial disruption?

No threat = 4, Low threat = 3, Moderate threat = 2, High threat = 1, Very high threat = 0

Current Year Score: 3

2021

Economist Intelligence

6.1.4b

What is the level of illicit arms flows within the country?

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

Current Year Score: 3

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: 2

2021

Economist Intelligence

6.1.5 Armed conflict

6.1.5a

Is this country presently subject to an armed conflict, or is there at least a moderate risk of such conflict in the future?

No armed conflict exists = 4, Yes; sporadic conflict = 3, Yes; incursional conflict = 2, Yes, low-level insurgency = 1, Yes; territorial conflict = 0

Current Year Score: 4

2021

Economist Intelligence

6.1.6 Government territorial control

6.1.6a

Does the government's authority extend over the full territory of the country?

Yes = 1, No = 0

Current Year Score: 1

2021

Economist Intelligence

6.1.7 International tensions

6.1.7a

Is there a threat that international disputes/tensions could have a negative effect?

No threat = 4, Low threat = 3, Moderate threat = 2, High threat = 1, Very high threat = 0

Current Year Score: 2

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: 99.1

2014

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: 0.74

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

2017

World Bank; Economist Impact

6.2.3b

Share of employment in the informal sector

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

Current Year Score: 0

Hungary's share of employment in the informal sector is less than 25%. The 2017 Member State Factsheets published by the European Platform Undeclared Work estimates that the share of undeclared employment is around 17% of all employment.

[1] The statistical databases maintained by the World Bank and the International Labor Organization do not provide statistics on informal employment in Hungary. [2] [3]

[1] European Platform Undeclared Work. 2017. "Member State Factsheets".

[https://ec.europa.eu/social/main.jsp?catId=1322&langId=en] Accessed 12 November 2020

[2] World Bank. "Informal employment (% of total non-agricultural employment)."

[https://data.worldbank.org/indicator/SL.ISV.IFRM.ZS?locations=HU]. Accessed 5 November 2020.

[3] International Labor Organization. "Country profiles." [https://ilostat.ilo.org/data/country-profiles/]. Accessed 5 November 2020.

6.2.3c

Coverage of social insurance programs (% of population)

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

Current Year Score: 3

2016, or latest available

World Bank; Economist Impact calculations

6.2.4 Public confidence in government

6.2.4a

Level of confidence in public institutions

Input number

Current Year Score: 2

2021

Economist Intelligence Democracy Index

6.2.5 Local media and reporting

6.2.5a

Is media coverage robust? Is there open and free discussion of public issues, with a reasonable diversity of opinions?

Input number

Current Year Score: 1

2021

Economist Intelligence Democracy Index

6.2.6 Inequality

6.2.6a

Gini coefficient

Scored 0-1, where 0=best

Current Year Score: 0.3

Latest available.

World Bank; Economist Impact calculations

6.3 INFRASTRUCTURE ADEQUACY

6.3.1 Adequacy of road network

6.3.1a

What is the risk that the road network will prove inadequate to meet needs?

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

Current Year Score: 4

2021

Economist Intelligence

6.3.2 Adequacy of airports

6.3.2a

What is the risk that air transport will prove inadequate to meet needs?

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

Current Year Score: 3

2021

Economist Intelligence

6.3.3 Adequacy of power network

6.3.3a

What is the risk that power shortages could be disruptive?

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

Current Year Score: 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: 71.64

2019

World Bank

6.4.2 Land use

6.4.2a

Percentage point change in forest area between 2006–2016

Input number

Current Year Score: -0.03

2008-2018

World Bank; Economist Impact

6.4.3 Natural disaster risk

6.4.3a

What is the risk that the economy will suffer a major disruption owing to a natural disaster?

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

Current Year Score: 2

2021

Economist Intelligence

6.5 PUBLIC HEALTH VULNERABILITIES

6.5.1 Access to quality healthcare

6.5.1a

Total life expectancy (years)

Input number

Current Year Score: 76.07

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: 554.5

2019

WHO

6.5.1c

Population ages 65 and above (% of total population)

Input number

Current Year Score: 19.69

2019

World Bank

6.5.1d

Prevalence of current tobacco use (% of adults)

Input number

Current Year Score: 30.6

2018

World Bank

6.5.1e

Prevalence of obesity among adults

Input number

Current Year Score: 26.4

2016

WHO

6.5.2 Access to potable water and sanitation

6.5.2a

Percentage of homes with access to at least basic water infrastructure

Input number

Current Year Score: 99

2017

UNICEF; Economist Impact

6.5.2b

Percentage of homes with access to at least basic sanitation facilities

Input number

Current Year Score: 97.99

2017

UNICEF; Economist Impact

6.5.3 Public healthcare spending levels per capita

6.5.3a

Domestic general government health expenditure per capita, PPP (current international \$)

Input number

Current Year Score: 1461.61

2018

WHO Global Health Expenditure database

6.5.4 Trust in medical and health advice

6.5.4a

Trust medical and health advice from the government

Share of population that trust medical and health advice from the government , More than 80% = 2, Between 60-80%, or no data available = 1, Less than 60% = 0

Current Year Score: 1

2018

Wellcome Trust Global Monitor 2018

6.5.4b

Trust medical and health advice from medical workers

Share of population that trust medical and health advice from health professionals , More than 80% = 2, Between 60-80%, or no data available = 1, Less than 60% = 0

Current Year Score: 2

2018

Wellcome Trust Global Monitor 2018